

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802-4213

In response refer to: 2007/07472:KAS

THEG 2.1 2007

John R. McMahon, Brigadier General South Pacific Division U.S. Army Corps of Engineers 1455 Market Street, 16th Floor San Francisco, California 94103-1398

Dear General McMahon:

Thank you for your letter dated November 13, 2007, requesting a programmatic consultation from NOAA's National Marine Fisheries Service (NMFS) pursuant to the essential fish habitat (EFH) provisions of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) for eight categories of actions regularly permitted by the U.S. Army Corps of Engineers (USACE). Staffs from the USACE and NMFS have collaborated on developing programmatic and activity-specific criteria to avoid or minimize adverse effects of individual and cumulative instances of covered activities.

Section 305(b)(2) of the MSA requires federal action agencies to consult with NMFS for any action they authorize, fund, or undertake that may adversely affect EFH. Programmatic consultation provides an efficient and effective means for NMFS and a federal agency to consult regarding a potentially large number of similar individual actions occurring within a given geographic area. NMFS has determined that in accordance with 50 CFR 600.920(j) of the EFH regulations, programmatic consultation is appropriate for the categories of activities specified below because all activities are minor development activities routinely authorized by the USACE, and sufficient information is available to develop EFH Conservation Recommendations that will address reasonable foreseeable adverse impacts to EFH.

Overview of Programmatic Consultation

This programmatic consultation applies to the categories of actions regularly permitted by the USACE and included in the February 14, 2007, programmatic consultation completed by NMFS with USACE and U.S. Fish and Wildlife Service pursuant to section 7(a)(2) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). NMFS concurred with the Corps determination that the eight categories of activities described are not likely to adversely affect (NLAA) ESA listed species or critical habitat. The programmatic ESA consultation is referred to as the "NLAA Programmatic."



This programmatic EFH consultation applies to permit applications (standard individual permits, letters of permission, nationwide permits, general permits, or any combination of those types of authorization) under the USACE Los Angeles District's (LAD), San Francisco District's (SFD), and Sacramento District's regulatory programs. Program activities are described in detail in your December 6, 2006, letter and include, with certain limitations and restrictions: (1) bank stabilization, (2) boat dock construction, (3) bridge repairs, (4) culvert replacements, (5) navigational dredging, (6) levee maintenance, (7) piling installation, and (8) pipeline repairs.

For each project covered under this programmatic consultation, permit applicants are required to report specific information to USACE including adoption of the programmatic consultation criteria. In addition, NMFS will be provided project-specific information four weeks prior to project implementation for review. The USACE will assume NMFS concurrence if they do not receive written or e-mail comments regarding their decision within 15 days of receipt of notification. The USACE and NMFS will meet on an annual basis, and as needed, for the following purposes: (1) for annual tracking of covered projects, (2) to evaluate and discuss the continued effectiveness of the programmatic consultation, (3) to ensure that activities authorized by the programmatic consultation continue to minimize adverse effects to EFH, and (4) to update procedures and project criteria, if necessary. At any time, NMFS or USACE may revoke or revise this programmatic consultation if it is determined that it is not being implemented as intended.

Action Area

The proposed activities occur in areas identified as EFH for various life stages of fish species managed with the Pacific Groundfish Fishery Management Plan (FMP), the Coastal Pelagics FMP, and the Pacific Coast Salmonid FMP. The scope of this programmatic consultation includes marine, estuarine, and riverine areas within and offshore of the State of California, including the Northern California Coast, the Central California Coast, the Central Valley, San Francisco Bay and the Southern California Coast. Boundaries for these geographic areas are as follows:

Northern California coast: Oregon border south to the Humboldt-Mendocino County line; inland watersheds that drain to the Pacific Ocean.

Central California coast: Humboldt-Mendocino County line south to San Luis Obispo County; inland watersheds that drain to the Pacific Ocean, and San Francisco Bay and tributaries and marshes up to approximately Chipps Island.

Southern California coast: San Luis Obispo County south to the California-Mexico border; inland watersheds that drain to the Pacific Ocean.

Central Valley: Interior California watersheds that drain to the Sacramento and San Joaquin Rivers, the mainstem Sacramento and San Joaquin Rivers, the Sacramento-San Joaquin Delta, the lower mainstem Sacramento River to Chipps Island.

Areas where specific activities are not covered in this programmatic EFH consultation are described below in the description of each activity.

Description of Proposed Activities and Associated Adverse Effects to EFH

A general description and specific criteria for each activity, and adverse effects resulting from each activity are described below. For projects affecting marine mammal species (in the water or at haul-out sites), work windows, and other requirements are species-specific. These projects may require on-site monitors and Marine Mammal Protection Act authorizations or permits. Please contact NMFS Southwest Region Marine Mammal Team (562) 980-3232 for further information.

Based on information provided in the project description and developed during consultation, NMFS has evaluated potential adverse effect to EFH pursuant to section 305(b)(2) of the MSA:

(1) Bank stabilization

Description: For maintenance of existing bank stabilization, activity is limited to 500 feet in length for a specific episode. New bank stabilization projects shall not exceed 200 linear feet of stream bank or 1,000 square feet in area. For new bank stabilization projects, only bioengineering techniques designed to begin the process of naturally restoring the bank plant and animal community may be used. Design should emphasize the use of natural and local building materials, e.g., stone, gravel, sand, soil, wood, and native plants. Rock rip rap may be used in limited and discrete areas such as fill in a toe trench at the base of the bank and further up the bank where shear stress during high flow events are greatest. Any rock used should have as small a diameter as possible, be used sparingly, and be capped with sediment and native vegetation as part of the design. New bank stabilization projects that rely solely on rock rip rap for bank protection are not covered under this programmatic EFH consultation. The use of gabions, concrete mats, tires, and rubble is not covered under this programmatic EFH consultation for new bank stabilization projects or for maintenance of existing bank stabilization projects.

In general, riverine streambank within the work area and access routes must be outside of flowing or standing water. With prior NMFS approval, projects may occur in flowing or standing water if the project area can be isolated by placing silt fences and sand bags between the work area and live stream in order to prevent sediment input to the stream. Operations shall cease if flows rise above the silt fence levels. Dewatering shall not be used to obtain dry conditions. Except for the project footprint and access routes, the bed and banks shall be undisturbed.

This programmatic EFH consultation does not cover new bank stabilization projects on the Sacramento River upstream of Hamilton City or areas on the San Joaquin River upstream of the Merced River confluence.

For more specific requirements, including work windows, ESA- listed species considerations, and design considerations, see "U.S. Army Corps of Engineers Proposed Procedures for Permitting Projects that will Not Adversely Affect Selected Listed Species in California" dated November 16, 2006 (Enclosure A).

Adverse Effects: Activity normally would occur along estuarine and riverine shorelines, affecting intertidal and subtidal estuarine banks, and riparian vegetation along riverine banks. Bank stabilization projects, both individually and cumulatively, can adversely effect EFH through temporary impacts to the water column and permanent conversion of shorelines to uniform, artificial hard substrates, resulting in a loss of intertidal estuarine mudflats, subtidal estuarine soft bottom habitat, and/or riverine riparian cover. Shoreline armoring also causes increased energy seaward of the armoring, beach steepening, changes in sediment storage capacity, and loss of organic debris (Williams and Thom 2001). Bank stabilization projects will adversely affect EFH both temporarily and permanently along rivers and estuaries. Project size limitations help decrease adverse effects.

(2) Boat dock construction

<u>Description</u>: Activity is limited to reconfiguration of existing structures within an authorized marina area and construction of a single, new privately used boat dock for up to two boats. For reconfiguration in existing marinas, no dredging, additional slips, dock spaces, or expansion of any kind is authorized. Existing creosote piles in the project area that are affected by project activities must be completely removed or cut/broken at least three feet below mudline. There must be no increase in footprint for existing boat docks.

For construction of a single, new privately used boat dock, total project area may cover no more than 400 square feet of surface area and total slip space must measure less than 80 feet in length. Projects with multiple docks cannot be separated to meet the requirements of this programmatic consultation. No rip rap bank stabilization, excavation, creation of embayments, or removal of woody debris from the bank or channel is allowed.

The Southern California Coast, Northern California Coast and Central California Coast (except San Francisco Bay) are not included in this programmatic consultation. Specific areas in the Central Valley, including the mainstem Sacramento, San Joaquin, Mokelumne, and Calaveras Rivers and their tributaries are not included in this programmatic EFH consultation.

For more specific requirements on use of materials and work windows, see "U.S. Army Corps of Engineers Proposed Procedures for Permitting Projects that will Not Adversely Affect Selected Listed Species in California" dated November 16, 2006 (Enclosure A).

Adverse Effects: Dock reconfiguration can degrade EFH through shading, replacement of soft bottom habitat with placement of piers and other supporting structures, modifying water circulation, temporarily affecting water column habitat during construction activities, and disturbance via activities associated with the use and operation of the facilities (Nightingale and

Simenstad 2001). The shadow cast by an overwater structure affects both the plant and animal communities below the structure by limiting light for photosynthesizers, such as diatoms and benthic algae, eelgrass, and other macrophytes (Kahler *et al.* 2000, Haas *et al.* 2002), and by increasing predation by providing cover and perching platforms for piscivores (Helfman 1981). Wave energy and water transport alterations can impact the nearshore, detrital foodweb by altering the size, distribution, and abundance of substrate and detrital materials.

The measures included in the project description, including limiting the activity to reconfiguration of existing structures within a marina, allowing for no increase in dock footprint, removal of creosote piles, and limiting size of new private docks will minimize adverse effects of this activity to EFH.

(3) Bridge repairs/widening/replacement

<u>Description</u>: Activity may include placement of cofferdams, abutments, foundation seals, piers, and/or temporary construction and access fills across waters of the United States. Activity is limited to riverine habitat; activity in estuarine habitat is not included in this programmatic EFH consultation. Bridge widening or replacement projects designed to accommodate a projected increase in traffic or provide access to new developments are not included in this programmatic EFH consultation. New bridges are not covered under this programmatic EFH consultation. Bridge replacements must be sized to pass a 100-year flow event without encroachment into the stream channel.

For more specific criteria on work windows, work in flowing water, and design considerations, see "U.S. Army Corps of Engineers Proposed Procedures for Permitting Projects that will Not Adversely Affect Selected Listed Species in California" dated November 16, 2006 (Enclosure A).

Adverse Effects:

Activities could adversely affect EFH through loss of natural bottom substrate within the footprint of bridge components, and modification of flow and currents from placement on bridge components within the river channel. Measures included in the project description that limit projects to bridge replacements and riverine habitats without encroachment into the stream channel will minimize adverse effects to EFH.

(4) Culvert replacement/upgrade

<u>Description</u>: Activities include repair, rehabilitation or replacement of any previously authorized, currently serviceable structure, removal of sediment and debris in the vicinity of existing structures, and placement of rip rap to protect existing structures. The removal of sediment and debris and the placement of rip rap are limited to the minimum necessary to restore the waterway or ensure safety of the structure. Culverts must meet NMFS Fish Passage Guidelines and can be no longer than 100 feet. Replaced or upgraded culverts must be "in kind" or go up in order of preference set out in NMFS Fish Passage Guidelines. Culverts shall be sized

to accommodate a 100-year flow event and associated debris and sediment. Fine sediment shall be removed to an upland location.

Central Valley area projects are not included in this programmatic EFH consultation.

For more specific criteria on work windows, work in flowing water, and design considerations, see "U.S. Army Corps of Engineers Proposed Procedures for Permitting Projects that will Not Adversely Affect Selected Listed Species in California" dated November 16, 2006 (Enclosure A).

Adverse Effects: The majority of culvert replacement projects likely will be limited to riverine habitats, but could be located in tidally influenced areas near the mouths of creeks and/or rivers. Adverse effects of these activities include temporary disturbance of the water column and substrate during activities, permanent conversion of natural embankments and substrate with artificial, hard substrate, and potential scouring of soft bottom sediments from flow directly through the culvert. Measures in the project description limiting activities to replacement of existing structures, and limiting placement of rip rap will minimize adverse effects to EFH.

(5) Navigational dredging

<u>Description</u>: Activity includes dredging of no more than 25 cubic yards below the plane of the ordinary high water mark or the mean high water mark from navigable waters of the United States as part of a single and complete project. Dredging may include clamshell or suction dredging within the Sacramento-San Joaquin Delta of 1,000 cubic yards or less that does not create or expand aquatic areas outside of the existing floodplain or levees. Dredged materials must be deposited outside of levees or offsite. Decant water must be filtered prior to returning to surface waters.

Projects in the Northern California Coast, Central California Coast, and Southern California Coast areas are not included in this programmatic EFH consultation. Maintenance dredging projects in the mainstem Sacramento, San Joaquin, Mokelumne, and Calaveras Rivers and their tributaries are not included in this programmatic EFH consultation. USACE SFD and NMFS are currently working on a programmatic EFH consultation for maintenance dredging in San Francisco Bay. Dredging in San Francisco Bay is not covered under this programmatic EFH consultation.

Adverse Effects: Adverse effects of dredging on EFH can include: (1) direct removal/burial of prey organisms, (2) turbidity/ siltation effects, (3) contaminant release, exposure, and uptake, (4) release of oxygen consuming substances, (5) entrainment, (6) noise disturbance, and (7) alteration to hydrodynamic regimes and physical habitat (Hanson *et al.* 2003). Size and location limitations in the project description will minimize these potential adverse effects.

(6) Levee maintenance

<u>Description</u>: Activity includes placement of previously authorized material onto previously authorized, currently serviceable structure or fill without changing the character, scope, or size of the original fill. This activity does not include dredging from tidal areas for levee maintenance material.

Projects in Southern California Coast and Central Valley areas are not included in this programmatic consultation. USACE SFD and NMFS are currently working on a programmatic Letter of Permission, pursuant to section 10 of the River and Harbor Act of 1899, that includes levee maintenance within the Suisun Marsh. Projects in the Suisun Marsh areas are not included in this programmatic consultation. In the Northern California coast and Central California Coast areas, the streambed within the work area and access routes must be outside of flowing or standing water. With prior NMFS approval, projects that are proposed to occur in flowing or standing water in streams where salmonids are likely to be absent during the construction period may proceed if the project area can be isolated by placing silt fences and sand bags between the repair and live stream in order to prevent sediment input to the stream. Operations shall cease if flows rise above the silt fence levels.

For more specific criteria on work windows, work in flowing water, and design considerations, see "U.S. Army Corps of Engineers Proposed Procedures for Permitting Projects that will Not Adversely Affect Selected Listed Species in California" dated November 16, 2006 (Enclosure A).

Adverse Effects: Activities could occur in riverine or estuarine habitats. Adverse effects from levee maintenance include temporary increases in suspended sediment from fallback of sediment or maneuvering construction equipment into the work area, and loss of overhanging vegetation that may have established along the outboard slope of the levee. Limiting the activity to the footprint of a previously established levee and use of previously authorized material will avoid increasing the adverse effects of levee placement.

(7) Piling installation

<u>Description</u>: Pile driving done as part of other categories of actions listed in this programmatic EFH consultation must meet the criteria listed below. Pile driving to build structures or facilities not otherwise covered by this programmatic EFH consultation is not included. Projects such as buoys, floats, and other devices placed within anchorage or fleeting areas to facilitate moorage of vessels where the U.S. Coast Guard has established such areas for that purpose and non-commercial, single-boat, mooring buoys are included.

For Central Valley, Northern California Coast, Central California Coast, and Southern California Coast streams, a vibratory hammer may be used to install any number and size of steel, wood, or concrete piles.

For Northern California Coast, Central California Coast, and Southern California Coast bays and estuaries, a vibratory hammer may be used to install any number and size of steel, wood, or concrete piles.

For Northern California Coast, Central California Coast, and Southern California Coast bays and estuaries, an impact hammer may be used to install piles for projects using only one hammer, where less than 50 piles are installed per day, and where the following size requirements are met:

- wood piles any size;
- concrete piles piles must be 18 inches or less in diameter; and
- steel piles piles must be 12 inches or less in diameter and hammer must be 3000 pounds or smaller and must use wood cushion between the hammer and the piles.

For specific timing restrictions, see "U.S. Army Corps of Engineers Proposed Procedures for Permitting Projects that will Not Adversely Affect Selected Listed Species in California" dated November 16, 2006 (Enclosure A).

Adverse Effects: Pile driving can generate underwater sound pressure waves that may adversely affect the ecological function of EFH, modifying the water column such that managed fish and prey species are killed, harmed, or injured (CalTrans 2001, Longmuir and Lively 2001, Stotz and Colby 2001, Abbott and Bing-Sawyer 2002). The type and intensity of the sounds produced during pile driving depend on a variety of factors, including but not limited to, the type and size of the pile, the firmness of the substrate into which the pile is being driven, the depth of the water, and the type and size of the pile-driving hammer. Wood and concrete piles appear to produce lower sound pressures than hollow steel piles of similar size. Vibratory hammers produce lower intensity sounds than impacts hammers. Limitation on hammer type and size and type of pile, included in the project description, should minimize adverse effects to EFH.

(8) Pipeline repairs

<u>Description</u>: Activities include construction, maintenance, or repair of utility lines, including outfall and intake structures. This programmatic EFH consultation does not apply to new pipeline projects. Work may include trenching or boring. Replacement pipeline must be the same capacity as old pipeline. Pipelines must be relatively perpendicular to stream banks and cannot run along stream banks.

In the Central Valley area, this programmatic EFH consultation only applies to project pipelines four feet in diameter or less in dry stream channels less than 300 feet in elevation. Projects may occur in Central Valley area streams with surface flows less than 2 cubic feet per second (cfs) at the trenching site or with ponded water, and having a temperature of more than 80 degrees F, as long as the pipeline diameter and channel elevation criteria are met. For freshwater areas outside of the Central Valley, the streambed within the work area must be dry throughout the construction period, with no flowing or ponded water.

For specific timing restrictions, see "U.S. Army Corps of Engineers Proposed Procedures for Permitting Projects that will Not Adversely Affect Selected Listed Species in California" dated November 16, 2006 (Enclosure A).

Adverse Effects: Adverse effects to EFH from pipeline installation can occur through destruction of organisms and habitat during construction, increases in turbidity, resuspension of contaminants, and changes in hydrology (Hanson *et al.* 2003). Limitations for working in flowing water included in the project description should minimize adverse effects of pipeline repair projects in freshwater habitats. Adverse effects of activities in estuarine habitats, where working in dry conditions is not possible, will occur.

Conclusions

As described in the above effects analysis, NMFS has determined that the proposed actions would adversely affect EFH for various federally managed fish species within the Pacific Groundfish, Pacific Coast Salmonid, and Coastal Pelagic FMPs. The proposed actions contain measures to avoid, minimize, mitigate, or otherwise offset the majority of adverse effects to EFH. However, some adverse effects may be unavoidable.

EFH Conservation Recommendations

The following EFH Conservation Recommendations are provided to avoid, minimize, and/or mitigate for impacts to EFH. NMFS advises USACE that these recommendations be incorporated into any project using this programmatic EFH consultation.

Project Tracking

1. For the purpose of annual tracking and determining cumulative effects, the USACE will provide an annual summary of the activities undertaken and will provide geographical coordinates (*i.e.*, latitude/longitude coordinates) for each action. This information will include the number of each action, the amount of acres of habitat adversely affected and the type of habitat adversely affected. The USACE will make this information available to NMFS and the public on an annual basis. Information may be made available to the public through postings on the USACE website.

Sensitive Habitats

- 2. The USACE should ensure that projects avoid impacts to sensitive habitat resources, including rock habitat (e.g., bedrock, boulders, cobble, gravel, etc.), submerged aquatic vegetation, kelp, native oysters, and intertidal mudflats. For avoidance of direct impacts, activities should be located no less than 30 feet from existing sensitive habitat resources.
- 3. When impacts to sensitive habitat resources, including rock habitat (e.g., bedrock, boulders, cobble, gravel, etc.), submerged aquatic vegetation, kelp, and/or native oysters are

unavoidable the USACE should: (1) notify NMFS of potential impacts, (2) ensure a biological survey is conducted to map the coverage of the sensitive resources, and (3) ensure a mitigation plan is developed to compensate for biological resource losses. The results of the biological survey and the mitigation plan should be submitted to USACE and NMFS for review and approval. EFH coordination requirements shall not be considered complete until the USACE and NMFS concur on the adequacy of the proposed mitigation plan. If concurrence is not reached between the agencies, an individual EFH consultation shall be conducted for the proposed action.

- 4. The USACE should ensure tree removal is limited to points of ingress and egress during proposed construction activities. If trees must be removed from other portions of project sites, no willows over 3 inches in diameter at breast height (dbh) should be removed and the canopy cover provided by hardwoods should not be reduced. Any trees removed should be replanted to achieve 1:1 successful revegetation.
- 5. USACE should implement the Southern California Eelgrass Mitigation Policy for all projects within Southern California, especially those projects that result in benthic disturbance (e.g., piling installation, dredging, etc.). This policy addresses, among other issues, the mitigation site, mitigation ratio, mitigation techniques, timing and monitoring for Southern California. In many cases, this information can also be used as a reference for Central and Northern California. The policy can be accessed at: http://swr.nmfs.noaa.gov/hcd/eelpol.htm.
- 6. The USACE LAD should implement the Southern California *Caulerpa* Control Protocol. The protocol is designed to minimize the spread and introduction of this species and other potentially invasive species of this genus to California nearshore, coastal, and enclosed bays, estuaries, and harbors from Morro Bay to the U.S./Mexican border. The protocol can be accessed at: http://swr.nmfs.noaa.gov/hcd/caulerpa/ccp.pdf.

Bank Stabilization

7. Wherever possible, soft approaches (e.g., beach nourishment, vegetative plantings, and placement of large woody debris) to shoreline modifications should be utilized.

Boat Docks

- 8. Docks should be located in sufficiently deep waters to avoid intertidal and shade impacts, to minimize or preclude dredging, to minimize groundings, and to avoid displacement of submerged aquatic vegetation.
- 9. Measures that increase the ambient light transmission under piers and docks should be incorporated into project design. These measures include, but are not limited to, maximizing the height of the structure and minimizing the width of the structure to decrease shade footprint, grated decking material, using solar tubes or glass blocks to direct sunlight under structure.

- 10. Floating breakwaters should be used whenever possible, and at least one foot of water should be maintained between the substrate and the bottom of the float.
- 11. All pilings and navigational aids, such as moorings and channel markers, should be fit with devices to prevent perching by piscivorous bird species.

Dredging

- 12. New dredging should be avoided to the maximum extent practicable. Activities that would likely require dredging (such as placement of piers, docks, marinas, *etc.*) should be sited in deep water areas or designed to alleviate the need for maintenance dredging.
- 13. Bankward slopes of the dredged area should be slanted to acceptable side slopes (e.g., 3:1) to ensure that sloughing does not occur.

Levee Maintenance

14. Whenever feasible, alternative levee maintenance methods (*e.g.*, brush boxes, vegetative plantings) and softening techniques (*e.g.*, backfill rip rap with sediment and plantings) should be incorporated into project design.

Piling Installation

15. In areas of strong current, piles should be installed when the current is reduced (*i.e.*, centered around slack current) to minimize the volume of water exposed to sound pressure waves.

Pipeline Repairs

- 16. Pipeline routes should be aligned along the least environmentally damaging route, avoiding sensitive habitats such as rock habitat, submerged aquatic vegetation, native oyster beds, emergent marsh, and intertidal sand and mudflats.
- 17. Horizontal direction drilling should be used through intertidal and tidal marsh areas.
- 18. Pipelines and submerged cables should be buried where possible.
- 19. Bentonite and other environmentally deleterious lubricants and fluids should not be used below ordinary high water.
- 20. Inactive pipelines and submerged cables should be removed unless they are located in sensitive areas. If allowed to remain in place, pipelines should be properly pigged, purged, filled with water, and capped prior to abandonment in place.

21. Silt curtains or other type barriers should be used to reduce turbidity and sedimentation if submerged aquatic vegetation or native oyster beds occur at or near the project site.

Statutory Response Requirement

Please be advised that regulations at section 305(b)(4)(B) of the MSA ad 50 CFR 600.920(k) of the MSA require your office to provide a written response to NMFS EFH Conservation Recommendations within 30 days of receipt and at least 10 days prior to final approval of the action. For all projects using this programmatic EFH consultation, the above EFH Conservation Recommendations must be incorporated into the project description.

Supplemental Consultation

Pursuant to 50 CFR 600.920(1), the USACE must reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH Conservation Recommendations. In the case of this programmatic EFH consultation, the USACE must reinitiate EFH consultation with NMFS if a proposed action is substantially revised in a way such that the activity is no longer covered by this programmatic EFH consultation.

For questions concerning this programmatic EFH consultation, please contact either Korie Schaeffer in the NMFS Santa Rosa Office at (707) 575-6087 or Bryant Chesney in the NMFS Long Beach Office at (562) 980-4037.

Singerely,

Robert S. Hoffman Assistant Regional Administrator for Habitat Conservation

cc: Bryant Chesney, NMFS Long Beach Penny Ruvelas, NMFS, Long Beach Dick Butler, NMFS, Santa Rosa Russ Strach, NMFS, Sacramento Irma Lagomarsino, NMFS, Arcata Jane Hicks, Corps, San Francisco David Castanon, Corps, Los Angeles Michael Jewell, Corps, Sacramento ARN150316SWR2007

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U.S. Army Corps of Engineers Proposed Procedures for Permitting Projects that will Not Adversely Affect Selected Listed Species in California

November 16, 2006

Staff from the U.S. Fish and Wildlife Service (FWS) California-Nevada Operations Office, U.S. Army Corps of Engineers (USACE) South Pacific Division, and National Marine Fisheries Service (NMFS) Southwest Region have jointly developed the following guidelines. We believe adoption of these procedural guidelines by the San Francisco, Sacramento, and Los Angeles Districts Regulatory Branches in California would ensure that the proposed actions described herein will not likely adversely affect the 66 listed species, distinct population segments (DPS), or evolutionarily significant units (ESU) (covered species) described in this document. Moreover, these guidelines will ensure that critical habitat for species listed will not likely be adversely affected. These procedures will become effective on the date that FWS and NMFS concurs with the USACE's "may affect, not likely to adversely affect" determination for purposes of this informal, programmatic consultation. This programmatic consultation will be in effect for five years following such concurrence, with opportunity for renewal.

- 1) The USACE will not need to initiate informal consultation for projects proposed within this programmatic biological assessment which meet the "may affect not likely to adversely affect" criteria within this Biological Assessment (BA). Instead, NMFS and FWS are anticipated to provide concurrence on a programmatic basis. However, for each project covered under this programmatic informal consultation, the USACE will record the project location; project type; discharge amount; overall project size; vegetation community type; any other relevant analysis of direct, indirect, and cumulative effects of the project; and the USACE's determination that the project's effects meet the "may affect, not likely to adversely affect" criteria.
- 2) FWS and NMFS will be provided project-specific information four weeks prior to project implementation. This notification is for information purposes only and does not require a response from FWS or NMFS for a project to proceed. Notification can be an electronic mail or fax to specified contacts in FWS field offices and/or NMFS Area Offices. FWS and/or NMFS will contact USACE within 15 days of receipt with any listed species or critical habitat concerns, including a determination that the proposed action may adversely affect listed species or critical habitat and should not be considered as part of this programmatic.

¹ Cumulative effects are the effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area (50 CFR 402.02).

- 3) If the USACE determines that a project does not meet the criteria within this programmatic BA, or if there are species or critical habitat within the action area that are not considered in the programmatic BA, the USACE will make an effects determination(s) and will initiate either formal or informal consultation with FWS and/or NMFS (as appropriate).
- 4) The ESA section 7 scope of analysis performed by the USACE for individual projects covered by this programmatic BA shall include an evaluation of the effects of the action and cumulative effects on covered species and/or critical habitat as defined in the Regulations for Interagency Cooperation (50 CFR Part 402). "Effects of the action" include the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interdependent or interrelated with the action that will be added to the environmental baseline. The "environmental baseline" includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions that are contemporaneous with the consultation in process. "Indirect effects" are those that are caused by or will result from the proposed action and are later in time, but are still reasonably certain to occur. "Interrelated actions" are those that are part of a larger action and depend on the larger action for their justification. "Interdependent actions" are those that have no independent utility apart from the action under consideration. Projects with interrelated and/or interdependent actions that may affect a covered species or critical habitat are not covered by this programmatic consultation.
- 5) USACE may call FWS and/or NMFS with specific project information for survey recommendations, habitat or species information, or any other issue which may require coordination.
- 6) USACE will contact NMFS and/or FWS prior to permit issuance for those projects where technical assistance is required as part of the project design criteria. Contact shall be made as early as possible to avoid project delay.
- 7) FWS and NMFS will ensure that the USACE is provided with updated information pertaining to covered species' location, distribution, timing, and habitat requirements. Additionally, NMFS and FWS will ensure that the USACE is provided with current information regarding critical habitat delineation and primary constituent elements.
- 8) NMFS, FWS, and the USACE will meet on an annual basis, at a minimum, and as needed, to evaluate and discuss the continued effectiveness of these guidelines for protecting covered species and to update procedures, project design criteria, and maps, if necessary. At least 30 days prior to these meetings, the USACE will provide a table identifying the following in regard to covered species: file number, location coordinates (latitude, longitude, and datum, if known), permittee, waterway, county, acreage of

impact to waters of the United States, and status of construction (not constructed, under construction, or completed). The USACE will also provide a summary of all projects covered under this programmatic during the year of reporting (*i.e.*, project location; project type; discharge amount; overall project size; vegetation community type; any other relevant analysis of direct, indirect, and cumulative effects of the project; and the USACE's determination that the project's effects meet the "may affect, not likely to adversely affect" criteria). If adaptive measures to this agreement are necessary, they will be explored at that time. At any time, NMFS, FWS, or USACE may revoke or revise this programmatic consultation if it is determined that it is not being implemented as intended, or if new information requires reinitiation of consultation.

9) Once per year, NMFS, FWS, and the USACE will provide training to USACE staff on effects determinations and the application of these programmatic guidelines. Training will be made available to regulatory project managers through workshops, web-based training, or other appropriate forums.

What must applicants submit to the USACE?

- 1) Fill out a USACE South Pacific Division Nationwide Permit Preconstruction Notification Form: http://www.spl.usace.army.mil/regulatory/SPD-wide_NWP-PCN-checklist web.doc.
- 2) A detailed project summary outlining when, where, and how the applicant proposes to do the project.
- 3) Maps showing project location. Maps must be at a scale of 1:24,000 or finer.
- 4) Any Project Design Criteria or standard operating procedures undertaken to achieve a NLAA determination.
- 5) Site description, including proposed project area and surrounding land. Site descriptions should include land uses, a general description of vegetative cover, and topography.

Description of Proposed Activities

This proposed action covers eight categories of projects as described below. The action area is the entire state of California, and covers the below listed species, distinct population segments, or evolutionarily significant units (covered species) and any critical habitat designated for those species.

It is anticipated that most activities authorized by the Corps of Engineers in accordance with the attached guidance criteria will be done so with Nationwide Permits or other forms of general permits (*i.e.*, Regional General Permits). Proposed activities that exceed the limits of certain Nationwide permits, but still meet the general and species-specific design criteria described herein, could be authorized by the Corps of Engineers with an individual Department of the Army permit, such as a Letter of Permission or Standard Permit.

The following descriptions of the categories of action are taken from the descriptions of the

Nationwide Permits (NWP) that pertain to those actions. Those permits may cover actions that fall outside the criteria that qualify an action as "not likely to adversely affect" a listed species or critical habitat. All applicable criteria described below and elsewhere for an action must be combined to form the description of an activity that will qualify for this programmatic. In the case of a conflict between criteria, the most protective or restrictive criteria applies. However, in the case of conflicting timing constraints, applicants may need to decide which window to adopt. USACE will need to initiate consultation for that project for the species whose criteria is not met.

- **1. Bank Stabilization** it is anticipated that most activities in this category will be authorized by NWP #13 (Bank Stabilization, Sections 10 R&HA 1899 and 404 CWA), including all relevant general and SPD-approved regional conditions in California. Bank stabilization activities are those necessary for erosion prevention provided the activity meets all of the following criteria:
 - a. no material is placed in excess of the minimum needed for erosion protection;
 - b. the bank stabilization activity is less than 500 feet in length;
 - c. the activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark or the high tide line;
 - d. no material is placed in any special aquatic site, including wetlands;
 - e. no material is of the type, or is placed in any location, or in any manner, to impair surface water flow into or out of any wetland area;
 - f. no material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas); and
 - g. the activity is part of a single and complete project.

Bank stabilization activities in excess of 500 feet in length or greater than an average of one cubic yard per running foot may be authorized if the permittee notifies the District Engineer in accordance with the "Notification" General Condition 13 and the District Engineer determines the activity complies with the other terms and conditions of the NWP and the adverse environmental effects are minimal both individually and cumulatively. This NWP may not be used for the channelization of waters of the United States. Proposed activities that exceed the limits of NWP #13, but still meet the general and species-specific design criteria described herein, could be processed and authorized by USACE with an individual Department of the Army (DA) permit (Letter of Permission [LOP] or Standard Permit [SP]).

- **2. Boat Docks** it is anticipated that some activities in this category will be authorized by NWP #28 (Modifications of Existing Marinas, Section 10), including all relevant general and SPD-approved regional conditions in California. NWP #28 authorizes the reconfiguration of existing docking facilities within an authorized marina area. No dredging, additional slips, dock spaces, or expansion of any kind within waters of the United States is authorized by this NWP. Proposed activities that exceed the limits of NWP #28 (*i.e.*, new construction of additional slips), but still meet the general and species-specific design criteria described herein, could be processed and authorized by USACE with an individual DA permit (LOP or SP).
- 3. Bridge Repair/Widening/Replacement it is anticipated that many activities in this category

will be authorized by NWP #15 (U.S. Coast Guard Approved Bridges, Section 404), including all relevant general and SPD-approved regional conditions in California. NWP #15 authorizes discharges of dredged or fill material incidental to the construction of bridges across navigable waters of the United States, including cofferdams, abutments, foundation seals, piers, and temporary construction and access fills provided such discharges have been authorized by the USCG as part of the bridge permit. Causeways and approach fills are not included in this NWP and will require an individual or regional Section 404 permit. Proposed activities that exceed the limits of NWP #15 (i.e., causeway and approach fills), but still meet the general and species-specific design criteria described herein, could be processed and authorized by USACE with an individual DA permit (LOP or SP).

- **4. Culverts Replace/Upgrade** it is anticipated that many activities in this category will be authorized by NWP #3 (Maintenance, Sections 10 and 404), including all relevant general and SPD-approved regional conditions in California. NWP #3 authorizes activities related to:
 - The repair, rehabilitation, or replacement of any previously authorized, currently (i) serviceable, structure, or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area including those due to changes in materials, construction techniques, or current construction codes or safety standards which are necessary to make repair, rehabilitation, or replacement are permitted, provided the adverse environmental effects resulting from such repair, rehabilitation, or replacement are minimal. Currently serviceable means useable as is or with some maintenance, but not so degraded as to essentially require reconstruction. This NWP authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the District Engineer, provided the permittee can demonstrate funding, contract, or other similar delays.
 - (ii) Discharges of dredged or fill material, including excavation, into all waters of the United States to remove accumulated sediments and debris in the vicinity of, and within, existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.) and the placement of new or additional riprap to protect the structure, provided the permittee notifies the District Engineer in accordance with General Condition 13. The removal of sediment is limited to the minimum necessary to restore the waterway in the immediate vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend further than 200 feet in any direction from the structure. The placement of rip rap must be the minimum necessary to protect the structure or to ensure the safety of the structure. All excavated materials must be deposited and retained in an upland area unless otherwise specifically approved

- by the District Engineer under separate authorization. Any bank stabilization measures not directly associated with the structure will require a separate authorization from the District Engineer.
- (iii) Discharges of dredged or fill material, including excavation, into all waters of the United States for activities associated with the restoration of upland areas damaged by a storm, flood, or other discrete event, including the construction, placement, or installation of upland protection structures and minor dredging to remove obstructions in a water of the United States. (Uplands lost as a result of a storm, flood, or other discrete event can be replaced without a Section 404 permit provided the uplands are restored to their original pre-event location. This NWP is for the activities in waters of the United States associated with the replacement of the uplands.) The permittee must notify the District Engineer, in accordance with General Condition 13, within 12months of the date of the damage and the work must commence, or be under contract to commence, within two years of the date of the damage. The permittee should provide evidence, such as a recent topographic survey or photographs, to justify the extent of the proposed restoration. The restoration of the damaged areas cannot exceed the contours, or ordinary high water mark, that existed before the damage. The District Engineer retains the right to determine the extent of the pre-existing conditions and the extent of any restoration work authorized by this permit. Minor dredging to remove obstructions from the adjacent waterbody is limited to 50 cubic yards below the plane of the ordinary high water mark, and is limited to the amount necessary to restore the pre-existing bottom contours of the waterbody. The dredging may not be done primarily to obtain fill for any restoration activities. The discharge of dredged or fill material and all related work needed to restore the upland must be part of a single and complete project. This permit cannot be used in conjunction with NWP 18 or NWP 19 to restore damaged upland areas. This permit cannot be used to reclaim historic lands lost, over an extended period, to normal erosion processes.

This permit does not authorize maintenance dredging for the primary purpose of navigation and beach restoration. This permit does not authorize new stream channelization or stream relocation projects. Any work authorized by this permit must not cause more than minimal degradation of water quality, more than minimal changes to the flow characteristics of the stream, or increase flooding. Proposed activities that exceed the limits of NWP #3, but still meet the general and species-specific design criteria described herein, could be processed and authorized by USACE with an individual DA permit (LOP or SP) or USACE-issued Regional General Permit (RGP), if applicable.

Note: NWP #3 authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Section 404(f) exemption for maintenance. See Levee Maintenance below for additional discussion of the maintenance exemption.

5. Dredging – it is anticipated that some activities in this category will be authorized by NWP #19 (Minor Dredging, Sections 10 and 404), or NWP #35 (Maintenance Dredging of Existing

Basins, Section 10), including all relevant general and SPD-approved regional conditions in California. NWP #19 authorizes dredging of no more than 25 cubic yards below the plane of the ordinary high water mark or the mean high water mark from navigable waters of the United States (i.e., Section 10 waters) as part of a single and complete project. NWP #19 does not authorize the dredging or degradation through siltation of coral reefs, sites that support submerged aquatic vegetation (including sites where submerged aquatic vegetation is documented to exist, but may not be present in a given year), anadromous fish spawning areas, or wetlands, or the connection of canals or other artificial waterways to navigable waters of the United States (see 33 CFR 322.5(g)). NWP #35 authorizes excavation and removal of accumulated sediment for maintenance of existing marina basins, access channels to marinas or boat slips, and boat slips to previously authorized depths or controlling depths for ingress/egress, whichever is less, provided the dredged material is disposed of at an upland site and proper siltation controls are used. Proposed activities that exceed the limits of NWP #19 or NWP #35, but still meet the general and species-specific design criteria described herein, could be processed and authorized by USACE with an individual DA permit (LOP or SP).

6. Levee Maintenance – it is anticipated that most activities in this category will be authorized by NWP #3 (Maintenance, Sections 10 and 404), including all relevant general and SPD-approved regional conditions in California, for activities related to the repair, rehabilitation, or replacement of any previously authorized, currently serviceable, structure, or fill, allowing for minor deviations in a structure's configuration, fill area, or materials (See #4 Culverts Replace/Upgrade above for detailed description of NWP #3). Proposed activities that exceed the limits of NWP #3, but still meet the general and species-specific design criteria described herein, could be processed and authorized by USACE with an individual DA permit (LOP or SP).

Also, Section 404(f)(1)(B) of the CWA exempts from the Section 404 permit requirement the discharge of dredged or fill material into waters of the U.S. "for the purpose of maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, and bridge abutments or approaches, and transportation structures." Such "exempt maintenance" does not include any modification that changes the character, scope, or size of the original fill, and emergency reconstruction must occur within a reasonable period of time after damage occurs in order to qualify for this exemption. The Section 404(f)(1)(B) exemption only applies to Section 404 waters of the U.S. Work in "navigable waters of the U.S," as defined in 33 CFR Part 329, triggers the need for DA authorization under Section 10 of the Rivers and Harbors Act of 1899. Maintenance activities determined by USACE to be exempt from regulation under Section 404 CWA are non-Federal actions not requiring a DA permit or consultation with FWS or NMFS under Section 7 ESA.

7. Piling Installation – it is anticipated that some activities in this category may be authorized by NWP #9 (Structures in Fleeting and Anchorage Areas, Section 10), or NWP #10 (Mooring Buoys, Section 10), including all relevant general and SPD-approved regional conditions in California. NWP #9 authorizes structures, buoys, floats and other devices placed within anchorage or fleeting areas to facilitate moorage of vessels where the USCG has established such

areas for that purpose. NWP #10 authorizes non-commercial, single-boat, mooring buoys. Proposed activities that exceed the limits of NWP #9 or NWP #10, but still meet the general and species-specific design criteria described herein, could be processed and authorized by USACE with an individual DA permit (LOP or SP) or RGP.

- **8. Pipelines Repair or Replace** it is anticipated that many activities in this category will be authorized by NWP #12 (Utility Line Activities, Sections 10 and 404), including all relevant general and SPD-approved regional conditions in California. NWP #12 authorizes activities required for the construction, maintenance and repair of utility lines and associated facilities in waters of the United States as follows:
 - Utility lines: The construction, maintenance, or repair of utility lines, including outfall and intake structures and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in preconstruction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication (see Note 1, below). Material resulting from trench excavation may be temporarily sidecast (up to three months) into waters of the United States, provided that the material is not placed in such a manner that it is dispersed by currents or other forces. The District Engineer may extend the period of temporary side casting not to exceed a total of 180 days, where appropriate. In wetlands, the top 6" to 12" of the trench should normally be backfilled with topsoil from the trench. Furthermore, the trench cannot be constructed in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). For example, utility line trenches can be backfilled with clay blocks to ensure that the trench does not drain the waters of the United States through which the utility line is installed. Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.
 - (ii) Utility line substations: The construction, maintenance, or expansion of a substation facility associated with a power line or utility line in non-tidal waters of the United States, excluding non-tidal wetlands adjacent to tidal waters, provided the activity does not result in the loss of greater than 1/2-acre of non-tidal waters of the United States.
 - (iii) Foundations for overhead utility line towers, poles, and anchors: The construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.
 - (iv) Access roads: The construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, excluding non-tidal wetlands adjacent to tidal waters,

provided the discharges do not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. Access roads shall be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes the adverse effects on waters of the United States and as near as possible to preconstruction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above preconstruction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

The term "utility line" does not include activities which drain a water of the United States, such as drainage tile, or french drains; however, it does apply to pipes conveying drainage from another area. For the purposes of this NWP, the loss of waters of the United States includes the filled area plus waters of the United States that are adversely affected by flooding, excavation, or drainage as a result of the project. Activities authorized by paragraphs (i) through (iv) may not exceed a total of 1/2-acre loss of waters of the United States. Waters of the United States temporarily affected by filling, flooding, excavation, or drainage, where the project area is restored to preconstruction contours and elevation, is not included in the calculation of permanent loss of waters of the United States. This includes temporary construction mats (e.g., timber, steel, geotextile) used during construction and removed upon completion of the work. Where certain functions and values of waters of the United States are permanently adversely affected, such as the conversion of a forested wetland to a herbaceous wetland in the permanently maintained utility line right-of-way, mitigation will be required to reduce the adverse effects of the project to the minimal level.

Mechanized land clearing necessary for the construction, maintenance, or repair of utility lines and the construction, maintenance and expansion of utility line substations, foundations for overhead utility lines, and access roads is authorized, provided the cleared area is kept to the minimum necessary and preconstruction contours are maintained as near as possible. The area of waters of the United States that is filled, excavated, or flooded must be limited to the minimum necessary to construct the utility line, substations, foundations, and access roads. Excess material must be removed to upland areas immediately upon completion of construction. This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322).

Notification: The permittee must notify the District Engineer in accordance with General Condition 13, if any of the following criteria are met:

- (a) mechanized land clearing in a forested wetland for the utility line right-of-way;
- (b) a Section 10 permit is required;
- (c) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet;
- (d) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to a stream bed that is within that jurisdictional area;

- (e) discharges associated with the construction of utility line substations that result in the loss of greater than 1/10-acre of waters of the United States;
- (f) permanent access roads constructed above grade in waters of the United States for a distance of more than 500 feet; or
- (g) permanent access roads constructed in waters of the United States with impervious materials.

Note 1: Overhead utility lines constructed over Section 10 waters and utility lines that are routed in or under Section 10 waters without a discharge of dredged or fill material require a Section 10 permit; except for pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States, which are considered to be bridges, not utility lines, and may require a permit from the USCG pursuant to section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material associated with such pipelines will require a Corps permit under Section 404.

Note 2: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work and the area restored to preconstruction contours, elevations, and wetland conditions. Temporary access roads for construction may be authorized by NWP 33.

Note 3: Where the proposed utility line is constructed or installed in navigable waters of the United States (*i.e.*, Section 10 waters), copies of the PCN and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

Proposed activities that exceed the limits of NWP #12, but still meet the general and species-specific design criteria described herein, could be processed and authorized by USACE with an individual DA permit (LOP or SP) or RGP.

Covered Species

Critical habitat has been designated for some of the species on the following lists, and is noted with an asterisk (*). This programmatic consultation applies to those designated critical habitats as well as to the species itself.

NMFS Covered Species and Critical Habitats

Fish

| Chinook Salmon (Oncorhynchus tshawytscha) | Sacramento River winter ESU* Central Valley Spring ESU* California Coastal ESU* | Endangered Threatened Threatened |
|--|--|--|
| Coho Salmon (Oncorhynchus kistuch) | Central California Coastal ESU* S. Oregon/N. CA Coastal ESU* | Endangered Threatened |
| Steelhead (Oncorhynchus mykiss) | Southern California DPS* South-Central California DPS* Central California Coast DPS* California Central Valley DPS* Northern California DPS* | Endangered Threatened Threatened Threatened Threatened |
| Green Sturgeon (Acipenser medirostris) | Southern DPS | Threatened |

Marine Mammals

| Blue whale (Balaenoptera musculus) | Endangered |
|--|------------|
| Fin whale (Balaenoptera physalus) | Endangered |
| Humpback whale (Megaptera novaeangliae) | Endangered |
| Sei whale (Balaenoptera borealis) | Endangered |
| Sperm whale (Physeter macrocephalus) | Endangered |
| Steller sea lion - eastern DPS (Eumetopias jubatus)* | Threatened |
| Killer whales - southern resident DPS (Orcinus orca) | Endangered |
| Northern Right Whale (Eubalaena glacialis) | Endangered |
| Guadalupe fur seals, (Arctocephalus townsendi) | Threatened |

Sea Turtles

| Leatherback turtle (Dermochelys coriacea) | Endangered |
|---|-----------------------|
| Loggerhead turtle (Caretta caretta) | Threatened |
| Olive ridley (Lepidochelys olivacea) | Endangered/Threatened |
| Green turtle (Chelonia mydas) | Endangered/Threatened |

FWS Covered Species

Amphibians and Reptiles

| California Tiger Salamander (Ambystoma californiense)* | Endangered |
|--|------------|
| Giant garter snake (Thamnophis gigas) | Threatened |
| Arroyo Toad Bufo (Microscaphus californicus)* | Endangered |
| California red-legged frog (Rana aurora draytonii)* | Threatened |

Invertebrates

| Valley elderberry longhorn beetle (Desmocerus californicus dimorphus | s)*Threatened |
|--|---------------|
| Conservancy Fairy Shrimp (Branchinecta conservation)* | Endangered |
| Longhorn Fairy Shrimp (Branchinecta longiantenna)* | Endangered |
| Vernal Pool Fairy Shrimp (Branchinecta lynchi)* | Threatened |
| Vernal Pool Tadpole Shrimp (Lepidurus packardi)* | Endangered |

Plants

Birds

| California clapper rail (Rallus longirostris obsoletus) | Endangered |
|---|------------|
| Least Bell's Vireo (Empidonax traillii extimus)* | Endangered |
| Southwestern Willow Flycatcher (Vireo bellii pusillus)* | Endangered |
| Northern Spotted Owl (Strix occidentalis caurina) * | Threatened |
| Marbled Murrelet (Brachyramphus marmoratus) * | Threatened |

Mammals

Salt Marsh Harvest Mouse (Reithrodontomys raviventris) Endangered

Fishes

Delta smelt (*Hypomesus transpacificus*)*

Tidewater Goby (*Eucyclogobius newberryi*)*

Endangered

Project Design Criteria

USACE, NMFS, and FWS developed the following project design criteria based on past consultations and technical assistance for the activities included in this biological assessment. The criteria are presented below for NMFS and FWS-jurisdiction species and critical habitat.

Project design criteria must be adhered to in order for the programmatic concurrence to be in effect. Projects deviating from the criteria will require individual informal or formal consultation.

Information Needed in the Notification Package

A project summary outlining what, when, and where (including latitude and longitude) the applicant proposes to do and the project purpose. Some categories require additional information or technical assistance and approval from NMFS.

General Criteria for NLAA Concurrence for NMFS Covered Species

Projects that may affect NMFS Covered Species occur throughout coastal and inland portions of California. The project design criteria differentiate between some areas of California based on species biological requirements, species vulnerability to project effects, and differing landscapes. The four areas used in the project design criteria correspond to NMFS Area Office jurisdictions and are as follows:

Northern California coast: Oregon border south to the Humboldt-Mendocino County line; inland watersheds that drain to the Pacific Ocean.

Central California coast: Humboldt-Mendocino County line south to San Luis Obispo County;

inland watersheds that drain to Pacific Ocean, and San Francisco Bays and tributaries and marshes up to approximately Chipps Island.

Southern California coast: San Luis Obispo County south to California – Mexico border; inland watersheds that drain to the Pacific Ocean.

Central Valley: Interior California watersheds that drain to the Sacramento and San Joaquin Rivers, the mainstem Sacramento and San Joaquin Rivers, the legal Sacramento-San Joaquin Delta, and the lower mainstem Sacramento River to Chipps Island.

In addition, special timing restrictions apply to streams with California Coastal (CC) Chinook salmon. NMFS Area Offices can supply information to Corps staff unsure if a stream contains CC Chinook salmon. For general reference, maps are located at the following URL's:

http://www.nwr.noaa.gov/ESA-Salmon-Listings/Salmon-Populatiosn/Maps/upload/chincc.pdf

and

http://www.nwr.noaa.gov/Salmon-Habitat/Critical-Habitat/Redesignations/upload/SWR-ESU-MAP.pdf

The following general criteria apply to all projects that may affect NMFS Covered Species listed above:

- 1. No large woody debris (LWD) removal in active (watered) channels. Limit tree removal to areas along points of ingress and egress. If trees need to be removed from other portions of project site, do not remove willows over 3 inches dbh or reduce canopy cover provided by hardwoods. Replant any trees removed to achieve 1:1 successful revegetation: a) Trees removed can be replanted at 3:1, or b) site can be monitored for 2 years and replanted until 1:1 success is achieved.
- 2. Limit new access routes to no more than two requiring tree removal and grading. Access routes should not be along the top of the stream bank but relatively perpendicular (45 to 90 degrees is acceptable) to bank.
- 3. Where available, use existing ingress or egress points, or perform work from the top of the stream banks.
- 4. Check heavy equipment daily for leaks. Do not use equipment until leak is fixed.
- 5. Refuel outside of active stream channel or above OHW at designated sites.
- 6. A Spill Prevention and Control Plan shall be created, and the Plan and all materials necessary to implement shall be accessible on site.

- 7. No work during wet weather or where saturated ground conditions exist; if a 60% chance of a one half inch of rain or more within a 24-hour period is predicted, then operations will cease until 24 hours after rain has ceased.
- 8. Petroleum products, chemicals, fresh cement, or water contaminated by the aforementioned shall not be allowed to enter flowing waters.
- 9. Projects will not contribute sand and smaller particles or sediment-water slurry to stream channel.
- 10. Adequate erosion control supplies (gravel, straw bales, shovels, *etc.*) shall be kept at all construction sites and during all maintenance activities to ensure materials are kept out of water bodies.
- 11. Any disturbed ground must receive appropriate erosion control treatment (mulching, seeding, planting, *etc.*) prior to the end of the construction season, prior to a cease of operations due to forecasted wet weather, OR within seven days of Project completion, whichever comes first. Operations will use all feasible techniques to prevent any sediment from entering a drainage system.
- 12. Remove work pads, falsework, and other construction items prior to end of construction window.
- 13. On the *Northern California Coast* and *Central California Coast*, or other areas expected or predicted to get rainfall during the construction season, effective erosion control measures shall be in place at all times during construction activities. Construction within the 5-year floodplain does not begin until all temporary erosion controls (*e.g.*, straw bales, silt fences that are effectively keyed in) are in place, downslope of project activities within the riparian area. Erosion control structures shall be maintained throughout, and possibly after, construction activities. Sediment shall be removed from sediment controls once it has reached on-third of the exposed height of the control. Whenever straw bales are used, they shall be staked and dug into the ground 12 centimeters (cm). Catch basins shall be maintained so that no more than 15 cm of sediment depth accumulates within traps or sumps.

Specific Criteria for NLAA Concurrence for NMFS Covered Species

Specific project design criteria for NMFS Covered Species are listed by project category below. These criteria include prescriptions on work timing, methods and materials approved for use, locations where the programmatic consultation does or does not apply, and any special notification or assistance requirements beyond the four week prior-notice described above. In addition, project criteria are intended to ensure stand-alone actions are not likely to adversely affect covered species and critical habitat. Large actions cannot be separated into component elements in order to be covered by this programmatic.

1. Bank Stabilization

- a. General Requirements: In general, the streambed within the work area and access routes must be outside of flowing or standing water. With prior NMFS' approval (see special notification requirements), projects that are proposed to occur in flowing or standing water in streams where listed salmonids are likely to be absent during the construction period may proceed if the project area can be isolated by placing silt fences and sand bags between the repair and live stream in order to prevent sediment input to the stream. Operations shall cease if flows rise above the silt fence levels. Dewatering shall not be used to obtain dry conditions. Except for project footprint and access routes, the bed and banks shall be undisturbed.
- b. New Bank Stabilization: New bank stabilization refers to areas that did not previously contain any type of manmade structure designed to stabilize the bank or protect against erosion. Projects shall not exceed 200 linear feet of stream bank or 1,000 square feet in area. New bank stabilization projects under this programmatic may occur in all streams except areas on the Sacramento River upstream of Hamilton City and areas on the San Joaquin River upstream of the Merced River confluence.

i. Work Windows:

Central Valley – June 15 through September 15 California Coastal (CC) Chinook streams – July 1 through September 15 Russian River, including Dry Creek – July 1 through August 15 All other listed salmonid streams – June 15 through October 15

ii. Specific Requirements: Only bioengineering techniques intended to create shaded riverine aquatic habitat, accumulate sediments, and increase in-stream habitat complexity may be used. Bio-technical projects emphasize the use of live plant material in the construction of durable erosion control structures. Projects should be designed to begin the process of naturally restoring the streambank's plant and animal community. Approaches that widen the floodplain area or the margin of the river channel near the low flow water surface and at the toe of the bank are encouraged. Design should emphasize the use of natural and local building materials, e.g., stone, gravel, sand, soil, wood, branched logs, and native plants. Rock rip rap may be used in limited and discrete areas such as fill in a toe trench at the base of the bank and further up the bank where shear stress during high stream flow events are greatest (not to exceed bankfull level). Any rock used should have as small a diameter as possible, be used sparingly, and be capped with sediment and native vegetation as part of the design. Projects that rely solely on rock rip rap for bank protection are not allowed. Gabions, concrete mats, tires, and rubble may not be used. Cables may be used to anchor large woody debris. Natural drainage patterns should be considered and incorporated into the design where appropriate.

iii. Special Notification/Assistance: Projects under this programmatic that are proposed to occur in flowing or standing water based on the absence of listed salmonids must provide the rationale for species' absence and to, obtain concurrence from, NMFS.

If grade control structures on salmonid streams are included, technical assistance from NMFS is required. In the **Central Valley** area, the conceptual models of the Standard Assessment Methodology (SAM; Corps 2004) shall be applied to the proposed action to design specific bank stabilization projects. The project design must be submitted to NMFS in the notification package, and demonstrate how the SAM concepts were applied to the project to avoid or minimize impacts and to protect, conserve, or enhance habitat values for listed anadromous fish.

c. Repair, Replacement, or Maintenance of Existing Bank Stabilization: Replacement of failing or damaged bank stabilization with rip-rap (no grouting or concrete mats) is allowed. Replacement with gabions, grouted rip-rap, debris (car bodies, pipe and tire revetments, *etc.*) is not allowed. The footprint of the repaired, replaced, or maintained bank stabilization must not exceed existing footprint.

i. Work Windows:

Central Valley – June 15 through September 15 CC Chinook streams – July 1 through September 15 Russian River, including Dry Creek – July 1 through August 15 All other listed salmonid streams – June 15 through October 15

- ii. Specific Requirements: Replacement with bioengineering techniques is encouraged. Rock rip rap-may be replaced with ungrouted rip-rap only. No new gabions, concrete mats, tire walls, car bodies, *etc.* are allowed. Rock rip-rap must including planting of native vegetation. Willow cuttings or other native plants shall be placed in spaces between rocks/boulders an average of one plant per square meter of bank stabilization. In the **Sacramento-San Joaquin Delta**, native emergent vegetation such as Tule may be used—an average of one plant per linear foot of bank stabilization. Rip-rap must be adequately sized for a 100-year flow event. Toe trenches may be used.
- iii. Special Notification/Assistance: If grade control structures on salmonid streams are included, technical assistance from NMFS is required. In the **Central Valley** area, the conceptual models of the Standard Assessment Methodology (SAM; Corps 2004) shall be applied to the proposed action to design specific bank stabilization projects. The project design must be submitted to NMFS in the notification package, and demonstrate how the SAM concepts were applied to the project to avoid or minimize impacts and to protect, conserve, or enhance habitat values for listed anadromous fish.

2. Boat Docks, Piers and Wharfs

- a. General Requirements: Southern California Coast, Northern California Coast and Central California Coast, (except San Francisco Bay) area projects are not included in this programmatic. Central Valley area projects included in this programmatic include those occurring in all areas except: the mainstem Sacramento, San Joaquin, Mokelumne, and Calaveras Rivers and their tributaries. Existing creosote piles in the project area must be completely removed or cut/broken at least three feet below mudline. No increase in footprint for existing boat docks.
- b. New Boat Dock, Pier and Wharf Construction: This programmatic covers construction of a single new privately owned and privately used boat dock (floating or non-floating using up to four piles) for up to two boats. Total project area covers no more than 400 square feet of surface area and total slip space measuring less than 80 feet in length. Projects with multiple docks cannot be separated to meet the requirements of this programmatic.
 - i. Work Windows:

Central Valley – June 15 through September 15 San Francisco Bay – June 15 through November 30

ii. Specific Requirements: Any chemically treated wood material (pilings, decking, etc.,) must be coated with an impact-resistant, biologically inert substance. Decking may be of plastic or non-reactive (e.g., epoxy wood) products. Floating docks or other floatation devices shall be materials that will not disintegrate, including concrete, steel, plastic or closed cell foam encapsulated in sun-resistant polyethylene. No rip-rap bank stabilization, excavation, creation of embayments, or removal of woody debris from the bank or channel is allowed.

Pile driving requirements: See Piling Installation and Removal below.

c. Repair, Replacement and Maintenance of Existing Boat Docks, Piers and Wharfs: This programmatic covers privately owned and used boat docks (floating or non-floating) that require replacement or repair of piles, decking, floatation devices, or hardware – provided that the repair or replacement does not increase the surface area, slip space, or slip capacity beyond that described for new construction. Projects with multiple docks cannot be separated to meet the requirements of this programmatic.

Projects included in this programmatic include those occurring in all areas except: the mainstem Sacramento, San Joaquin, Mokelumne, and Calaveras Rivers and their tributaries.

i. Work Windows:

Central Valley – June 15 through September 15 San Francisco Bay – June 15 through November 30 ii. Specific Requirements: Any chemically treated wood material (pilings, decking, etc.,) must be coated with an impact-resistant, biologically inert substance. Decking may be of plastic or non-reactive (e.g., epoxy wood) products. Floatation devices shall be materials that will not disintegrate, including concrete, steel, plastic or closed cell foam encapsulated in sun-resistant polyethylene. No rip-rap bank stabilization, excavation, creation of embayments, or removal of woody debris from the bank or channel is allowed.

Pile driving requirements: See Piling Installation and Removal below.

3. Bridge Repair/Widening/Replacement in Streams

a. General Requirements: Projects in bays or estuaries are not included in this programmatic. Bridge widening or replacement projects designed to accommodate a projected increase in traffic or provide access to new developments are not included in this programmatic. New bridges are not covered unless they replace an existing bridge that has been removed or will be removed prior to new bridge installation. In general, the streambed within the work area and access routes must be outside of flowing or standing water. With prior NMFS approval (see special notification requirements), projects that are proposed to occur in flowing or standing water in streams where listed salmonids are likely to be absent during the construction period may proceed if the project area can be isolated by placing silt fences and sand bags between the repair and live stream in order to prevent sediment input to the stream. Operations shall cease if flows rise above the silt fence levels. Dewatering shall not be used to obtain dry conditions. Except for project footprint, the bed and banks shall be undisturbed. In the Northern California Coast area, dewatering is allowed provided that past, or current, surveys of the project area indicate no presence of salmonids during the allowed construction window.

i. Work Windows:

Central Valley – June 15 through September 15
Northern California Coast – June 15 through October 15
Central California Coast – June 15 through October 15
CC Chinook streams – July 1 through September 15
Russian River, including Dry Creek – July 1 through August 15
Southern California Coast – June 1 through October 31

ii. Specific Requirements: Bridges must be sized to pass 100-year flow event without encroachment into stream channel. Piers must be cylindrical columns. If a natural channel is not left beneath the bridge, use requirements specific for culverts and arched culverts in *Culverts Replace/Upgrade* category. Also, see *Piling Installation and Removal* below.

iii. Special Notification or Assistance: Projects under this programmatic that are proposed to occur in flowing or standing water based on the absence of listed salmonids must provide the rationale for species' absence and to, obtain concurrence from, NMFS.

Technical assistance on bridge design is required for bridges crossing NMFS covered species streams. NMFS approval is needed for multi-year projects where falsework is left in the channel outside of the work windows.

- b. **Marine Mammals**: For bridge projects affecting marine mammal species (in the water or at haul-out sites), work windows and other requirements are species specific. These projects may require on-site monitors and Marine Mammal Protection Act authorizations or permits. Please contact NMFS Southwest Region Marine Mammal Team (562) 980-3232 for further information.
 - i. General Requirements for Marine Mammals:
 - Maintain rms underwater sound pressure below levels that can injure (180 dB re 1 micropascal) or affect the behavior (160 dB re1 micropascal) of marine mammals.
 - Maintain a 500 meter safety zone around sound source in the event the sound level is unknown or cannot be adequately predicted.
 - Maintain sound levels below 90 dBA in air when pinnipeds (seals and sea lions) are present.
 - Halt work activities (except pile driving) when a marine mammal enters the 500 meter safety zone.
 - Bring loud mechanical equipment on-line slowly.
 - Vessel operators should adjust vessel speed when marine mammals are in the project area. In the event of a vessel collision with a marine mammal, the responsible party must immediately contact NMFS Mr. Joe Cordaro at (562) 980-4017.

4. Culverts Replace or Upgrade

a. General Requirements: Central Valley area projects are not included in this programmatic. For all other projects on streams containing NMFS covered species, culverts covered by this programmatic must meet NMFS Fish Passage Guidelines and can be no longer than 100 feet. In general, the streambed within the work area and access routes must be outside of flowing or standing water. With prior NMFS approval (see special notification requirements), projects that are proposed to occur in flowing or standing water in streams where listed salmonids are likely to be absent during the construction period may proceed if the project area can be isolated by placing silt fences and sand bags between the repair and live stream in order to prevent sediment input to the stream. Operations shall cease if flows rise above the silt fence levels. Dewatering shall not be used to obtain dry conditions, except in the Northern California Coast area, dewatering is allowed provided that past, or current,

surveys of the project area indicate no presence of salmonids during the allowed construction window. Except for project footprint, the bed and banks shall be left as found.

Replaced or upgraded culverts must be "in kind" or go up in order of preference set out in NMFS Fish Passage Guidelines or maintain or create a passage barrier of adult of juvenile salmonids. Culverts shall be sized to accommodate a 100-year flow event and associated debris and sediment with HW <1.

Fine sediment cleaned out from the inside of culverts shall be removed to an upland location, where it cannot enter stream networks or road drainages that are hydrologically connected to a stream, and stabilized.

i. Work Windows:

Northern California Coast – June 15 through October 15 Central California Coast – June 15 through October 15 CC Chinook streams – July 1 through September 15 Russian River, including Dry Creek – July 1 through August 15 Southern California Coast – June 1 through October 31

ii. Special Notification or Assistance: Projects under this programmatic that are proposed to occur in flowing or standing water based on the absence of listed salmonids must provide the rationale for species' absence and to, obtain concurrence from, NMFS.

NMFS' technical assistance and approval on culvert design is required for culverts on streams containing NMFS covered species.

5. Dredging

- a. General Requirements: Projects in the Northern California Coast, Central California Coast, and Southern California Coast areas are not included in this programmatic for covered salmonid species (see marine mammal and sea turtle requirements below for coastal projects affecting those species). Dredging in San Francisco Bay operates under the Long Term Management Strategy, for which a biological opinion was signed on September 18, 1998.
- b. Central Valley area clamshell or suction dredging: Maintenance dredging projects within the Sacramento-San Joaquin Delta of 1,000 cubic yards or less that do not create or expand aquatic areas outside of the existing floodplain or levees. Maintenance dredging projects in the mainstem Sacramento, San Joaquin, Mokelumne, and Calaveras Rivers and their tributaries are not included in this programmatic.

- i. Work Window: June 1 through October 31
- ii. Specific Requirements: Deposit dredge spoils outside of levees or offsite. Decant water must be filtered prior to returning to surface waters.
- d. Marine Mammals: For dredging projects affecting marine mammal species (in the water or at haul-out sites), work windows and other requirements are species specific. These projects may require on-site monitors and Marine Mammal Protection Act authorizations or permits. Please contact NMFS Southwest Region Marine Mammal Team (562) 980-3232 for further information.
 - i. General Requirements for Marine Mammals:
 - Maintain rms underwater sound pressure below levels that can injure (180 dB re 1 micropascal) or affect the behavior (160 dB re1 micropascal) of marine mammals.
 - Maintain a 500 meter safety zone around sound source in the event the sound level is unknown or cannot be adequately predicted.
 - Maintain sound levels below 90 dBA in air when pinnipeds (seals and sea lions) are present.
 - Halt work activities when a marine mammal enters the 500 meter safety zone.
 - Bring loud mechanical equipment on-line slowly.
 - Projects shall cause only a temporary displacement of marine mammals (*i.e.*, they should not permanently compromise established haul-out sites).
 - Projects shall not block migratory corridors or block access to and from established haul-out sites.
 - Vessel operators should adjust vessel speed when marine mammals are in the project area. In the event of a vessel collision with a marine mammal, the responsible party must immediately contact NMFS Mr. Joe Cordaro at (562) 980-4017.
- e. **Sea Turtles:** Dredging projects in San Diego that use a clamshell or other non-hopper type dredge are allowed under this programmatic. Projects that use a hopper type dredge are not included. Contact NMFS Sea Turtle Recovery Coordinator with any questions about impacts to sea turtles (562) 980-4023.

6. Levee Maintenance

a. General Requirements: Projects in the **Southern California Coast** and **Central Valley** areas are not included in this programmatic. In the **Northern California Coast** and **Central California Coast** areas, the streambed within the work area and access routes must be outside of flowing or standing water. With prior NMFS approval (see special notification requirements), projects that are proposed to occur in flowing or standing water in streams where listed salmonids are likely to be absent during the construction period may proceed if the project area can be isolated by placing silt fences and sand bags between the repair and

live stream in order to prevent sediment input to the stream. Operations shall cease if flows rise above the silt fence levels.

i. Work Windows:

Northern California Coast – June 15 through October 15 Central California Coast – June 15 through October 15 CC Chinook streams – July 1 through September 15 Russian River, including Dry Creek – July 1 through August 15

ii. Special Notification: Projects under this programmatic that are proposed to occur in flowing or standing water based on the absence of listed salmonids must provide the rationale for species' absence and to, obtain concurrence from, NMFS.

7. Piling Installation

a. General Requirements: Projects in the **Southern California Coast** area are not included in this programmatic for covered salmonid species (however, see marine mammal requirements below for coastal projects affecting those species). Pile driving done as part of other categories of actions listed in this programmatic must meet category size and timing requirements listed for those activities.

Projects such as buoys, floats and other devices placed within anchorage or fleeting areas to facilitate moorage of vessels where the USCG has established such areas for that purpose and non-commercial, single-boat, mooring buoys are included. Proposed activities that exceed: the limits and purpose of NWP #9 or NWP #10; the limits described for docks, piers, wharfs, and bridges in this programmatic; or pile driving to build structures or facilities not otherwise covered by this programmatic are not included.

i. For Central Valley, Northern California Coast, and Central California Coast streams:

Vibratory hammer – may use steel, wood, or concrete; any size pile, any number. May only occur June 15 through October 15 to avoid disturbance of migrating salmonids. For streams with CC Chinook hammering may only occur July 1 through September 15. On the Russian River, including Dry Creek, work may only occur June 15 through August 15

Impact hammer – likely to adversely affect, needs individual consultation

ii. For San Francisco Bay:

Vibratory hammer – may use steel, wood, or concrete; any size pile, any number, and may occur year-round.

Impact hammer – Limited to projects using only one hammer and less than 50 piles installed per day.

- For wood piles Any size pile may occur year-round
- For concrete piles Piles must be 18 inches or less in diameter may occur year-round
- For steel piles Piles must be 12 inches or less in diameter and hammer must be 3000 pounds or smaller and must use wood cushion between hammer and pile – may occur year-round.
- b. Marine Mammals: For dredging projects affecting marine mammal species (in the water or at haul-out sites), work windows and other requirements are species specific. These projects may require on-site monitors and Marine Mammal Protection Act authorizations or permits. Please contact NMFS Southwest Region Marine Mammal Team (562) 980-3232 for further information.
 - i. General Requirements for Marine Mammals:
 - Maintain rms underwater sound pressure below levels that can injure (180 dB re 1 micropascal) or affect the behavior (160 dB re1 micropascal) of marine mammals.
 - Maintain a 500 meter safety zone around sound source in the event the sound level is unknown or cannot be adequately predicted.
 - Maintain sound levels below 90 dBA in air when pinnipeds (seals and sea lions) are present.
 - Halt work activities when a marine mammal enters the 500 meter safety zone.
 - Bring loud mechanical equipment on-line slowly.
 - Vessel operators should adjust vessel speed when marine mammals are in the project area. In the event of a vessel collision with a marine mammal, the responsible party must immediately contact NMFS Mr. Joe Cordaro at (562) 980-4017.

8. Pipeline Repair or Replacement

- a. General Requirements: Does not apply to new pipeline projects. Except for project footprint, the bed and banks shall be left as found.
- b. Trenching: The streambed within the work area **outside of the Central Valley** must be dry throughout the construction period no flowing or ponded water. Dewatering shall not be used to obtain dry conditions. Do not disturb streamside woody vegetation. Re-seed banks with native vegetation to stabilize disturbed banks. Restore channel to pre-project contours and characteristics (no loss of pools, riffles, or cover) prior to natural rewatering of work area. Place pipeline beneath stream's scour line. Replacement pipeline must be the same capacity as old pipeline. In the **Central Valley** area, this programmatic only applies to

project pipelines four feet in diameter or less in dry stream channels less than 300 feet in elevation. Projects may occur in **Central Valley** area streams with surface flows less than 2 cfs at the trenching site or with ponded water, and having a temperature of more than 80 degrees F, as long as the pipeline diameter and channel elevation criteria are met.

i. Work Windows:

Central Valley – June 15 through September 15
Northern California Coast – June 15 through October 15
Central California Coast – June 15 through October 15
CC Chinook streams – July 1 through September 15
Russian River, including Dry Creek – June 15 through August 15
Southern California Coast – June 1 through October 31

- ii. Specific Requirements: Pipeline must be relatively perpendicular to stream banks (45-90 degrees) and cannot run along stream banks. Replaced pipelines do not need to be in the same location as long as old pipeline is removed from stream bed and banks.
- iii. Special Notification or Assistance: If grade control structures are included, technical assistance from NMFS is required. Pre-project notification must include a list of all affected streams, if multiple crossings are included in the action.
- c. Boring: The applicant has performed a geologic analysis and there is a low likelihood that a frac-out will occur. A NMFS-approved contingency plan has been prepared and ready for implementation. An emergency response team and equipment must be maintained on site at all stream crossings. No woody plant material may be removed from the bank or stream channel; construction equipment and personnel shall operate outside the stream channel and banks or levees so that no in-channel impacts occur.

i. Work Windows:

Central Valley – June 15 through September 15
Northern California Coast – June 15 through October 15
Central California Coast – June 15 through October 15
CC Chinook streams – July 1 through September 15
Russian River, including Dry Creek – June 15 through August 15
Southern California Coast – June 1 through October 31

- ii. Specific Requirements: Pipeline projects in the **Central Valley** area must be buried at least 30 feet below the substrate.
- iii. Special Notification or Assistance: If grade control structures are included, technical assistance letter from NMFS is required. Pre-project notification must include a list

of all affected streams, if multiple crossings are included in the action. NMFS is also the required geotechnical survey and the emergency response and cleanup plan for review prior to construction. Contact NMFS field office immediately in the case of a frac-out.

- d. Marine Mammals: For dredging projects affecting marine mammal species (in the water or at haul-out sites), work windows and other requirements are species specific. These projects may require on-site monitors and Marine Mammal Protection Act authorizations or permits. Please contact NMFS Southwest Region Marine Mammal Team (562) 980-3232 for further information.
 - i. General Requirements for Marine Mammals:
 - Maintain rms underwater sound pressure below levels that can injure (180 dB re 1 micropascal) or affect the behavior (160 dB re1 micropascal) of marine mammals.
 - Maintain a 500 meter safety zone around sound source in the event the sound level is unknown or cannot be adequately predicted.
 - Maintain sound levels below 90 dBA in air when pinnipeds (seals and sea lions) are present.
 - Halt work activities when a marine mammal enters the 500 meter safety zone.
 - Bring loud mechanical equipment on-line slowly.
 - Vessel operators should adjust vessel speed when marine mammals are in the project area. In the event of a vessel collision with a marine mammal, the responsible party must immediately contact NMFS Mr. Joe Cordaro at (562) 980-4017.

General Criteria for NLAA Concurrence for FWS Covered Species:

- 1. A qualified biologist will conduct a biological resources education program for workers prior to the beginning of activities, and appoint a crew member to act as an on-site biological monitor. The educational program will include a description of the listed species and their habitats, and the guidelines that will be followed by all construction personnel to avoid take of the species during activities. A set of guidelines will be provided to each contractor participating in the project, and the crew foreman will be responsible for ensuring that crew members comply with the guidelines.
- 2. During project activities, all trash that may attract predators will be properly contained, removed from the work site, and disposed of regularly. Following maintenance activities, all trash and maintenance debris will be removed from work areas.
- 3. All refueling, maintenance, and staging of equipment and vehicles will occur in a location where a spill would not drain directly toward aquatic habitat. Prior to the

onset of work, the Corps will ensure that a plan is in place for prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

- 4. The number of access routes, size of staging areas, and the total area of the activity will be limited to the minimum necessary to achieve the project goal. Project limits will be established and defined with physical markers to confine access routes and maintenance areas to the minimum area necessary to complete maintenance, and avoid impact to listed species habitat; this includes locating access routes and maintenance areas outside of drainages or creeks to the maximum extent practicable.
- 5. To control sedimentation during and after project implementation, the Corps and its contractors will implement best management practices outlined in any authorizations or permits, issued under the authorities of the Clean Water Act that it receives for a specific project. If best management practices are ineffective, the Corps will attempt to remedy the situation immediately, in coordination with the Service.
- 6. For pumps used during construction activities, intakes will be completely screened with wire mesh not larger than 0.2 inch to prevent aquatic species from entering the pump system
- 7. To ensure that diseases (*e.g.*, ich or chytrid fungus) are not conveyed between work sites by biologists conducting surveys, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force will be followed at all times. A copy of the code of practice is enclosed.
- 8. Pets will be prohibited from project sites.

The following criteria are centered around the term 'Action Area', and the effects to listed species in the Action Area from any proposed project. This distinction is important, as the term is often interpreted under NEPA as just the project footprint. Use of the term here is intended to represent its meaning under the ESA, as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." In order to receive NLAA determinations through the following criteria, the analysis of Action Area for these projects must include the full scope of where species may be directly and indirectly affected by the proposed action.

California Tiger Salamander (Ambystoma californiense)

NLAA determination:

The project's Action Area is within the known range of the species, it encompasses suitable salamander habitat components (*i.e.*, aquatic features [small water bodies, such as vernal pools

and stock ponds, holding water for at least 10 weeks during March-May] which may be used for salamander breeding and larval development and/or upland habitat, adjacent to aquatic features, with underground refugia [e.g., small mammal burrows] which may be used by aestivating salamanders during the dry season), and is either documented to support salamanders or has not been completely surveyed for salamanders using the approved survey protocol^{2,3}. A NLAA determination may be made if:

- (a) no construction-related activities will occur in any potential salamander breeding site;
- (b) project activities will not appreciably alter suitable upland habitat within 1.24 miles (2 km) of any potential salamander breeding sites;
- (c) project activities will not preclude movement of salamanders by creating an inadequate configuration of appropriate habitat components, or appreciably increase detrimental human activities on same; and
- (d) all upland construction activities with the potential to affect salamander breeding sites (e.g., sedimentation from ground disturbance) will occur outside of the period when these breeding sites are wet (e.g., November through March for breeding, February through June for larval development).

No Effect determination may be supported:

- (a) The project's Action Area is not within the known range of the species, has been surveyed for salamanders using the approved survey protocol^{1,2} and no salamanders were detected, or the FWS has determined that surveys were not necessary, or
- (b) The project's Action Area is within the known range of the species, has been surveyed for salamanders using the approved survey protocol^{1,2} and no salamanders were detected, and no suitable salamander habitat components (*i.e.*, potential breeding sites, or suitable upland habitat within 1.24 miles of same) will be affected by project activities.

Giant garter snake (Thamnophis gigas)

NLAA determination:

² Field surveys conducted in years with at least 70% of average rainfall between September 1 and April 1, at the nearest National Oceanic and Atmospheric Administration climate station are most reliable. Data from surveys not meeting this criterion may not be considered unless a strong justification is provided.

³ Surveys must be conducted by a person with a valid Recovery Permit for salamanders pursuant to section 10(a)(1)(A) of the Endangered Species Act.

The project's Action Area encompasses suitable snake habitat (*i.e.*, aquatic or wetland features that hold sufficient water, either continually or intermittently between May 1 and October 1, and/or upland habitat, adjacent to aquatic/wetland habitat, with suitable snake winter refugia). A NLAA determination may be made if:

- (a) All 'in-water' construction activities will occur outside of the snake's active season, defined as May 1 to October 1, in any given year;
- (b) The existing hydrology/configuration in the aquatic/wetland habitat is maintained, or restored to pre-existing conditions prior to the snake's active season of May 1 to October 1;
- (c) There will be no grading, clearing, grubbing, or other similar construction-related disturbance of suitable upland snake habitat within 200 feet of suitable snake aquatic/wetland habitat;
- (d) Grading, clearing, grubbing, or other similar construction-related disturbance of suitable upland snake habitat between 200 820 feet of suitable aquatic/wetland snake habitat will only occur between May 1 and October 1 of any given year; and
- (e) There will be no rip-rap or similar permanent bank stabilization materials placed in suitable snake foraging or aquatic dispersal habitats.

No Effect determination may be supported:

- (a) The project's Action Area boundary is located at least 820 feet from the edge of any suitable aquatic or wetland snake habitat. Suitable upland habitat for snakes is generally considered to extend 200 feet away from the edge of aquatic or wetland habitat; however, snakes have been known to occasionally travel up to 820 feet into surrounding upland habitat, or
- (b) The project's Action Area is located between 200 820 feet from the edge of any suitable aquatic or wetland snake habitat and either: (i) natural or artificial barriers exist to prevent snake dispersal beyond the 200 foot zone surrounding snake habitat, or (ii) there will be no grading, clearing, grubbing, or other disturbance in suitable upland snake habitat, or
- (c) The project's Action Area encompasses aquatic or wetland habitats, but these habitats are completely dry during the snake's active season, defined as the period between May 1 and October 1.

Valley elderberry longhorn beetle (Desmocerus californicus dimorphus)

NLAA determination:

The project's Action Area is within the known range of the species and either a) any project activities will occur in a range between 20 and 100 feet from the dripline of suitable beetle habitat (i.e., elderberry shrubs [Sambucus spp.] with one or more stems measuring 1.0 inch or greater in diameter at ground level), or b) all project activities will occur outside the 100 foot buffer zone, but the Action Area extends to within 20 feet of the driftline of suitable elderberry shrubs. A NLAA determination may be made if all of the following conditions are met:

- (a) 20-foot zones around all elderberry shrubs, as measured from the dripline, will be fenced and flagged to avoid disturbance of shrubs;
- (b) Heavy construction-related activities will not occur during the adult beetle emergence period of late March through June;
- (c) No pesticides (*e.g.*, insecticides, herbicides) or other toxic compounds will be applied in the 20-100 foot buffer zone, or beyond the 100 foot boundary in such a manner that they could drift or otherwise move into the 20-100 foot buffer zone;
- (d) Dust control measures will be implemented during the adult beetle emergence period of late March through June;
- (e) All contractors will be informed on the need to avoid damaging elderberry plants;
- (f) Signs will be posted at 50 foot intervals along the edge of the avoidance area stating that the area is habitat for the valley elderberry longhorn beetle, which is a threatened species and must not be disturbed;
- (g) Work crews will be instructed about the status of the beetle and the need to protect its elderberry plant host; and
- (h) Any and all damage done to the 20-100 foot buffer zone will be restored by implementing erosion control measures and by revegetating the area with native plants.

No Effect determination may be supported:

(a) The project's Action Area is outside the known range of the species, and surveys for suitable beetle habitat (*i.e.*, elderberry shrubs) with one or more stems measuring 1.0 inch or greater in diameter at ground level) have resulted in negative findings.

(b) The project's Action Area is within the known range of the species, but the Action Area boundary is located further than 100 feet from suitable beetle habitat (i.e., elderberry shrubs) with one or more stems measuring 1.0 inch or greater in diameter at ground level.

Selected Listed Plant Species

Loch Lomond button-celery (Eryngium constancei)

Contra Costa goldfields (Lasthenia conjugens)

Butte County meadowfoam (Limnanthes floccosa ssp. californica)

Few-flowered navarretia (Navarretia leucocephala ssp. pauciflora)

Many-flowered navarretia (Navarretia leucocephala ssp. plieantha)

Hairy Orcutt grass (Orcuttia pilosa)

Sacramento Orcutt grass (Orcuttia viscida)

Lake County stonecrop (Parvisedum leiocarpum)

Greene's tuctoria (Tuctoria greenei)

Solano grass (Tuctoria mucronata)

Fleshy owl's clover (Castilleja campestris ssp. succulenta)

Hoover's spurge (Chamaesyce hooveri)

Colusa grass (Neostapfia colusana)

San Joaquin Valley Orcutt grass (Orcuttia inaequalis)

Slender Orcutt grass (Orcuttia tenuis)

White sedge (Carex albida)

Suisun thistle (Cirsium hydrophilum var. hydrophilum)

Soft bird's-beak (Cordylanthus mollis ssp. mollis)

Palmate-bracted bird's-beak (Cordylanthus palmatus)

Pitkin Marsh lily (Lilium paradalinum ssp. pitkinense)

Callistoga allocarya (Plagiobothrys strictus)

Napa bluegrass (Poa napensis)

Kenwood Marsh checkermallow (Sidalcea oregana ssp. valida)

California sea blite (Suaeda californica)

NLAA determination:

The project's Action Area is within the range of at least one of the above federally-listed plant species, it encompasses all or part of a vernal pool or swale, vernal pool complex, vernal pool watershed, or other species-specific wetland type as appropriate, and any of the three following conditions exist: 1) one or more of the plant species is known to occur in the Action Area; 2) the Action Area has not been surveyed to determine presence in accordance with USFWS-approved survey protocols for these plant species; 3) the Action Area is, or was historically, hydrologically connected to areas with documented occurrences of any of these plant species. A NLAA determination may be made if:

(a) A buffer of at least 1500 feet is maintained between the outer boundaries of any vernal pool, vernal swale, or other species-specific wetland type as appropriate and any project-related ground disturbance or other impacts,

An *a priori* NLAA determination for these above federally-listed plant species cannot be made for:

(a) Projects, such as culvert repair or replacement, pipeline installation or replacement, bridge widening, or large boat dock installation, that may facilitate permitted and/or non-permitted development,

or

(b) Projects for which some activity (e.g., staging area) is proposed to occur within the boundaries of any vernal pool or swale, regardless of the buffer width between the vernal pool or swale and any project-related ground disturbance.

No Effect determination may be supported:

(a) The project's Action Area is outside the known range of the above listed plant species, and surveys for these listed plants using Service-approved protocols have been conducted and resulted in negative findings.

Four Vernal Pool Crustaceans:

Conservancy Fairy Shrimp (Branchinecta conservation)
Longhorn Fairy Shrimp (Branchinecta longiantenna)
Vernal Pool Fairy Shrimp (Branchinecta lynchi)
Vernal Pool Tadpole Shrimp (Lepidurus packardi)

NLAA Determination:

The project's Action Area is within the range of federally-listed vernal pool plant crustacean species, it encompasses all or part of a vernal pool or swale, a vernal pool complex, or a vernal pool watershed, and any of the three following conditions exist: 1) one or more of the federally-listed vernal pool crustacean species is known to occur in the Action Area; 2) the Action Area has not been surveyed to determine presence in accordance with USFWS-approved survey protocols for federally-listed vernal pool crustacean species⁴; 3) the Action Area is, or was historically, hydrologically connected to areas with documented occurrences of federally-listed vernal pool crustacean species. A NLAA determination may be made if:

⁴ Due to the dearth of occurrence information for both the Conservancy and Longhorn fairy shrimp, and to the potential that these species have severely limited numbers and distributions, a NLAA determinations cannot be made in the following counties: Butte, Glenn, Merced, Solano, Stanislaus, Tehama, Yolo, and Ventura for the Conservancy fairy shrimp; Alameda, Contra Costa, Merced, San Luis Obispo for the Longhorn fairy shrimp.

- (a) No ground disturbance or any other habitat alteration will occur in vernal pools that may support vernal pool crustaceans, or in swales that are ecologically connected to the vernal pools;
- (b) There will be no construction-related activities that could permanently alter the surface or subsurface hydrology of the vernal pool crustacean habitat (e.g., dewatering of hydrologically-connected surface waters, deep ripping or other physical disturbance of underlying soils, creating unseasonal flows with urban runoff or other sources);
- (c) Any permanent alteration of existing topography will occur no closer than 250 feet from the outermost boundary of any vernal pool or swale;
- (d) Any temporary alteration of existing topography within 250 feet of the outermost boundary of any vernal pool or swale will only occur during the dry season, and the disturbed areas will be fully restored (*i.e.*, topography restored with stockpiled inoculum to its original pre-disturbed condition and re-vegetated with locally-acquired sources of native vernal pool seeds and plants) prior to the start of the next wet season;
- (e) There will be no direct discharge of sediments or soils from project-related activities into any vernal pool or swale, and all excavated soils and sediments within 250 feet of the outermost boundary of any vernal pool or swale are managed to prevent their indirect movement into any vernal pool or swale (e.g., placed on tarps and adequate erosion control measures implemented);
- (f) No pesticides (e.g., insecticides, herbicides) or other toxic compounds will be applied within 250 feet of any vernal pool or swale, or beyond the 250 foot buffer in such a manner that they could drift or otherwise move into the vernal pools or swales; and
- (g) There will be no parking of construction-related equipment (e.g., vehicles, generators) within 250 feet of any vernal pool or swale.

No Effect determination may be supported:

(a) The project's Action Area is outside the known range of the listed vernal pool crustaceans, or surveys for the listed species in all potential habitat in the Action Area using USFWS-approved protocols have been conducted and resulted in negative findings.

Soft Bird's-Beak (Cordylanthus mollis spp. Mollis)

Soft bird's-beak is a partially parasitic annual plant which occurs in salt and brackish tidal

marshes fringing San Pablo and Suisun Bays in the San Francisco Bay area. The plant is restricted to a narrow tidal band, typically in higher elevation zones within larger tidal marshes that have tidal channel networks. It parasitizes other plants by attaching root structures to the roots of other plants to extract water and nutrients.

Potentially destructive actions associated with the Corps projects considered include: excavation, temporary road construction, petroleum spills, dredging spoils deposit, dewatering (for bridge repair), and new pile installation (hole-drilling). These activities could result in soil disturbance, changes in hydrology (more water or less water), changes in salinity of the water, and polluted water or soil. Alteration of hydrologic processes may result in drier ground, which in turn supports non-native plant species such as perennial pepperweed (*Lepidium latifolium*) that compete with soft bird's-beak.

Soft bird's-beak would be adversely affected by any action that would directly crush or bury the plants, reduce the area of tidal marsh, change the freshwater inflow into the marsh, increase marsh salinity, alter the natural tidal regime, pollute the water or soil (as from petroleum spills or leachate from treated timber or asphalt), bury the plant's seedbanks, or affect the abundance of the species' host plants. Soft bird's-beak does not appear to have a specific host plant preference; known suitable hosts are *Distichlis spicata* (salt grass), *Salicornia virginica* (pickleweed), and *Jaumea carnosa* (marsh jaumea).

NLAA determination:

For projects with Action Areas within the known range of the species, and which encompass all or part of a tidal marsh where the species is known to occur or that has not been surveyed for the species' presence, a NLAA determination may be made if:

- (a) The project footprint is not within a tidal marsh, or in the immediate watershed of a tidal marsh;
- (b) There will be no ground disturbance or any other habitat alteration within 250 feet of the outermost boundary of any tidal marsh;
- (c) There will be no dumping or storage of soils or sediments within 250 feet of the outermost boundary of any tidal marsh;
- (d) There will be no alteration or disturbance of channels that feed or drain a tidal marsh that results in changes in the amount of flow or salinity of water to the marsh (this also includes ditching, dredging, and altering hydrologic processes);
- (d) No pesticides (*e.g.*, insecticides, herbicides, rodenticides) or other toxic compounds will be applied within 250 feet of the outermost boundary of a tidal marsh, or beyond the 250 foot buffer in such a manner that they could drift or otherwise move into a tidal marsh; and

(f) All construction-related vehicles and equipment will only be parked or driven on existing roads.

An a priori NLAA determination for soft bird's-beak cannot be made for:

(a) Projects, such as culvert repair or replacement, pipeline installation or replacement, bridge widening, or large boat dock installation, which may facilitate permitted and/or non-permitted development.

No Effect determination may be supported:

(a) The project's Action Area is outside the known range of the species and adequate surveys for the species' presence in all potential habitat in the Action Area have been conducted and resulted in negative findings.

California clapper rail (Rallus longirostris obsoletus)

The project's Action Area is within the known range of the species, encompasses suitable habitat components, and the species is either known to occur within the Action Area or the Action Area has not been adequately surveyed to determine presence.

NI AA determination:

- (a) All project-related activities occur outside of the clapper rail breeding season of February 1 August 31;
- (b) There will be no loss, either temporary (e.g., ground disturbance) or permanent (e.g., soil or sediment removal), of suitable clapper rail habitat;
- (c) No pesticides (*e.g.*, insecticides, herbicides, rodenticides) or other toxic compounds will be applied within 250 feet of the outermost boundary of suitable clapper rail habitat, or beyond the 250 foot buffer in such a manner that they could drift or otherwise move into suitable habitat; and
- (d) All construction-related vehicles and equipment will only be parked or driven on existing roads.

No Effect determination may be supported:

(a) The project's Action Area is outside the known range of the species and adequate surveys for the species' presence in all potential habitat in the Action Area have been conducted and resulted in negative findings.

Salt Marsh Harvest Mouse (Reithrodontomys raviventris)

The project's Action Area is within the known range of the species, encompasses suitable habitat components, and the species is either known to occur with the Action Area or the Action Area has not been adequately surveyed to determine presence.

NLAA determination:

- (a) There will be no loss, either temporary (e.g., ground disturbance) or permanent (e.g., soil or sediment removal), of suitable salt marsh harvest mouse habitat;
- (b) No pesticides (e.g., insecticides, herbicides, rodenticides) or other toxic compounds will be applied within 250 feet of the outermost boundary of suitable salt marsh harvest mouse habitat, or beyond the 250 foot buffer in such a manner that they could drift or otherwise move into suitable habitat; and
- (c) All construction-related vehicles and equipment will only be parked or driven on existing roads.

No Effect determination may be supported:

(a) The project's Action Area is outside the known range of the species and adequate surveys for the species' presence in all potential habitat in the Action Area have been conducted and resulted in negative findings.

Delta smelt (Hypomesus transpacificus)

NLAA determination:

The project's Action Area is within the known range of the species and encompasses suitable habitat components. A NLAA determination may be made if:

- (a) All in-water construction activities will occur between August 1 and November 30 of any given year; and
- (b) The project will not result in a loss of any shallow water habitat (*i.e.*, within the top 10 feet of the water column).

No Effect determination may be supported:

(a) The project's Action Area is outside the known range of the species.

Arroyo Toad Bufo (Microscaphus californicus)

The project's Action Area is within the known range of the species and encompasses suitable habitat components, and is either documented to support arroyo toads or has not been completely surveyed for arroyo toads using the approved survey protocol.

NLAA determination:

- (a) The Corps will conduct pre-construction surveys at the appropriate time (see below for species-specific time periods) prior to and during work activities. If an arroyo toad appears in the Action Area, work will halt until consultation is completed with the Service.
- (b) No work will be conducted during the breeding season, from February through July.
- (c) No work activities will be allowed within 100 feet of any open water that would result in stepping on, trampling, or crushing arroyo toads that may be in burrows or outside of the water.
- (d) Site surveys for the presence of arroyo toads will be conducted between March 15 and July 1 by qualified biologists using Service-approved protocols in project areas.
- (e) Walking along stream margins or trampling streambanks will not be allowed.

No Effect determination may be supported:

(a) The project's Action Area is outside the known range of the arroyo toad, or surveys for the arroyo toad using Service-approved protocols have been conducted and resulted in negative findings.

California red-legged frog (CRLF) (Rana aurora draytonii)

The project's Action Area is within the known range of the species, it encompasses suitable CRLF habitat components, and any of the three following conditions exist: 1) it has been documented that the Action Area, or an area within a one mile (1.6 km) radius of the Action Area, currently supports CRLF; 2) there are documented records of historical occurrence within the Action Area; or 3) the Action Area has not been surveyed to determine frog presence using Service-approved survey protocols.

NLAA determination:

(a) A NLAA determination cannot be made for projects that will occur within habitat known to contain a population of CRLF;

- (b) All 'in-water' construction related activities will occur outside the CRLF's breeding season. For the purposes of this consultation, this season is generally December through May, dependent on rainfall;
- (c) Pre- construction surveys for CRLF will be conducted prior to and during construction activities and, if frogs are observed, all construction is halted until consultation with the Service is completed and it can be determined that frogs will not be adversely affected;
- (d) All stream contours impacted by project related activities are returned to their original condition within one construction season, unless consultation with the Service has determined that it is not beneficial to the species or feasible to do so;
- (e) All areas impacted by project related activities are revegetated with an appropriate assemblage of native riparian wetland and upland vegetation suitable for the area. A species list and restoration and monitoring plan shall be included with the project proposal for review and approval by the Service and the Corps. Such a plan must include, but not be limited to, location of the restoration, species to be used, restoration techniques, time of year the work will be done, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved;
- (f) There will be no rip-rap or similar permanent bank stabilization materials placed in suitable CRLF habitats; and
- (g) No pesticides (e.g., insecticides, herbicides) or other toxic compounds will be applied within 250 feet of any suitable CRLF aquatic habitat, or beyond the 250 foot buffer in such a manner that they could drift or otherwise move into the aquatic habitat.

No Effect determination may be supported:

- (a) The Action Area is not within the known range of the species, has been surveyed using Service-approved protocols and no frogs were detected, or the Service has determined that surveys were not necessary, or
- (b) The Action Area is within the known range of the species, and has either: 1) been surveyed using Service-approved protocols and no frogs were detected, or 2) there are no records of historical occurrence within the Action Area **and** no suitable CRLF habitat (aquatic or terrestrial) will be affected by any project activity.

Tidewater Goby (Eucyclogobius newberryi)

The project's Action Area is within the known range of the species and encompasses suitable

habitat components. Pre-construction surveys for tidewater goby are not recommended. According to the Service's protocol, tidewater goby surveys require capture and handling which is an adverse effect (or may even reach the level of take). Also, no seasonal restrictions are available that would avoid adverse effects to this species since it is a permanent resident of the habitats where it occurs.

NLAA determination:

(a) Protocol level surveys conducted resulted in negative findings and/or, no historical records that would lead us to believe the species could be present.

No effect determination may be supported:

(a) A biological evaluation of the site's habitats that shows the action area is not habitat for the species.

<u>Least Bell's Vireo (Empidonax traillii extimus)</u> and <u>Southwestern Willow Flycatcher (Vireo bellii pusillus)</u>

The project's Action Area is within the known range of the species and encompasses suitable habitat components.

NLAA determination:

- (a) Negative survey results, using Service-recommended protocols, within one year of the proposed impacts AND a requirement of pre-construction surveys during the breeding season (see below for species-specific breeding seasons) prior to and during work in suitable habitat. If one of the listed birds is detected during pre-construction surveys, work will not be initiated until consultation is completed. Typically, this consultation would consist of more survey work to determine if the listed bird is just moving through or is setting up a territory. If the bird is determined to be moving through and leaves the site, then the area would be determined to be unoccupied. If the bird is setting up a territory (occupied habitat), formal consultation may be required unless the project proponent can comply with ALL of the provisions below;
- (b) Work will be done during a season when adverse effects will be minimized further. By species, these seasonal restrictions (when activities should be avoided) are:
 - 1. Least Bell's vireo Avoid work during the breeding season, from March 15 through September 15.

⁵ Note that with negative protocol survey results typically completed by mid summer, the pre-construction surveys are not necessary if project construction is initiated and completed before the next breeding season.

2. Southwestern willow flycatcher – Avoid work during the breeding season, May 1 through August 31.

Because these migratory birds both have a high degree of philopatry for breeding territories, any occupied habitat loss must be determined to be insignificant even if the direct loss of habitat occurs outside of the breeding season;

- (c) There must be no change to the hydrology/sediment transport that would negatively affect occupied habitat;
- (d) Effects related to noise at 60 db or above during the breeding season will be avoided;
- (e) Any lighting needed for the project will be shielded from occupied habitat;
- (f) No known invasive plant species will be used in a plant palette for the project;
- (g) Access to suitable habitat by pets and people will be restricted;
- (h) The project has a setback of at least 500 feet from occupied habitat. The setback limits will help address construction, long-term noise levels, lighting, and runoff issues. In addition, a setback would preserve upland foraging areas for least Bell's vireo;
- (i) The project must not attract brown-headed cowbirds above ambient numbers. Should the project facilitate an action that could potentially attract cowbirds, (e.g., building a dairy farm or equestrian center) the project would not meet the requirements of a NLAA; and
- (j) Areas that are temporarily impacted must be restored to pre-construction contours and revegetated with appropriate plant species with a follow-up monitoring and reporting requirement.

No Effect determination may be supported:

(a) A biological evaluation of the site's habitats that shows the action area could not support the species and the species has not been recorded previously.

Northern Spotted Owl (Strix occidentalis caurina)

NLAA determination:

The following guidelines apply to projects involving disturbance only, no modification of suitable habitat. Disturbance is defined as any activity that results in an increase in noise above

background levels (e.g., operating heavy equipment, chainsaws, etc) within 0.25 mile (1,320 feet) from a currently occupied site (i.e., activity center, nest site), or suitable nesting habitat that has not been previously surveyed using the most recent survey protocols. For intensive disturbance (e.g., explosives, pile driving, etc.), a distance up to 1.0 mile (5,280 feet) from a currently occupied site (i.e., activity center, nest site), or unsurveyed suitable nesting habitat will be used.

- (a) Action occurs during the late breeding season from July 10 through July 31.
- (b) Actions occurring from August 1 through January 31 will not affect northern spotted owls.

The following guidelines apply to projects involving modification of suitable habitat.

- (a) Habitat modification occurs in occupied or unsurveyed suitable nesting and roosting habitat during the period from September 16 through January 31;
- (b) No vegetation is removed in a known nest grove or within 1,000 feet of a known nest tree;
- (c) No potential nest trees (large trees or snags > 24 inches dbh with cavities, broken tops, multiple tops, mistletoe infections, or other deformities) are removed or degraded; and
- (d) No conifers or hardwood trees greater than 11 inches dbh are removed. The removal of trees does not alter the dominant, codominant, or intermediate canopy. No overstory trees are removed.

Critical Habitat for the Northern Spotted Owl

The PCE's for the northern spotted owl include forested lands that are used or potentially used by the northern spotted owl for nesting, roosting, foraging, or dispersing.

NLAA determination:

(a) Within the Action Area, activities that remove or degrade less than 0.25 acre of PCE's (nesting, roosting, foraging, or dispersal habitat; or stands that are capable of becoming suitable habitat) and do not remove potential nest trees.

No Effect determination may be supported:

(a) Actions that do not degrade or remove PCE's (nesting, roosting, foraging, or dispersal habitat, or stands that are capable of becoming suitable habitat).

Marbled Murrelet (Brachyramphus marmoratus)

NLAA determination:

The following guidelines apply to projects involving disturbance only, no modification of suitable habitat. Disturbance is defined as any activity that results in an increase in noise above background levels (e.g., operating heavy equipment, chainsaws, etc) within 0.25 mile (1,320 feet) from a currently occupied site or suitable nesting habitat that has not been previously surveyed using the most recent survey protocols. For intensive disturbance (e.g., explosives, pile driving, etc.), a distance up to 1.0 mile (5,280 feet) from a currently occupied site or unsurveyed suitable nesting habitat will be used.

- (a) Action occurs from March 24 through September 15 only during the time period between two hours after sunrise and two hours before sunset within 0.25 mile of unsurveyed suitable nesting habitat. This measure is only appropriate if habitat quality within 0.25 mile of the project site is low and protocol surveys conducted in the watershed imply that murrelet occupancy is unlikely. Avoid work in or within 0.25 mile of occupied or unsurveyed high quality nesting habitat during the breeding season, March 24 through September 15.
- (b) Action occurs from August 6 through September 15 only during the time period between two hours after sunrise and two hours before sunset within 0.25 mile of unsurveyed suitable nesting habitat. This measure is only appropriate if habitat quality within 0.25 mile of the project site is low.
- (c) Actions occurring from September 16 through March 23 will not affect marbled murrelets.

The following guidelines apply to projects involving modification of suitable habitat.

- (a) No vegetation removal in occupied sites or high quality habitat.
- (b) No potential nest trees (large trees, generally greater than 32 inches dbh, with the presence of potential nest platforms or deformities such as large or forked limbs, broken tops, mistletoe infestations, or other formations providing platforms for nesting) are removed.
- (c) No trees with a canopy height of at least one-half the site-potential tree height are removed within 0.5 mile of a potential nest tree.

Critical Habitat for the Marbled Murrelet:

The PCE's for the marbled murrelet include (1) forested stands containing large-sized trees,

generally more than 32 inches (81 centimeters) in diameter with potential nesting platforms at sufficient height, generally greater than or equal to 33 feet (10 meters) in height; and (2) the surrounding forested areas within 0.5 mi (0.8 km) of these stands with a canopy height of at least one-half the site-potential tree height.

NLAA determination:

(a) Based on site-specific basis, but activities remove or degrade less than 0.25 acre of trees with a canopy height of at least one-half the site potential tree height and do not remove trees with potential nesting structure.

No effect determination may be supported:

(a) Actions that do not degrade or remove PCE's.